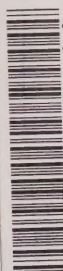


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# MAJOR ISSUES OF THE MINISTRY OF THE ENVIRONMENT

SEPTEMBER 1990



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*by*

**The Ontario Ministry  
of The Environment**

## INTRODUCTION

This document provides a summary description of the major issues of concern to the Ontario Ministry of the Environment.

Each of the issues is described in terms of:

- . Background: the circumstances from which it has arisen;
- . Current Situation: its current status and developments pertinent to it; and
- . Future Action: proposals for ongoing activities.


They cover a wide range of concerns, from broad, provincial-level policy issues at one end to more local problems, the solutions of which, however, may set precedents or have implications for similar situations elsewhere in the province.

The briefing document is divided into two parts. In part one, key issues are identified. They have been selected because:

- . they reflect the elements of the NDP campaign platform most directly relating to the Ministry;
- . they deal with those major policy thrusts for which there will be strong expectations for early government action; or
- . they concern a specific matter on which early direction will be required.

Every effort has been made to reflect a spirit of openness, flexibility and adaptability in anticipating policies which the incoming government will wish to review or revise. Inevitably, however, "the constraint of current momentum" will have found its way into some of the notes. As new directions are set by the government, Ministry staff will quickly adjust to establish a new momentum.

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KEY ISSUES

MINISTRY OF THE ENVIRONMENT



KEY ISSUES

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# WASTE MANAGEMENT





ISSUE:        **Greater Toronto Area (GTA) Solid Waste Management Strategy**

BACKGROUND:

- .        The goals of the GTA's Solid Waste Management Plan are:
  - fulfill provincial targets for waste diversion of 25% by 1992 and 50% by 2000;
  - create a state-of-the-art system for processing solid waste;
  - maximize industrial development opportunities for host communities;
  - construct an innovative framework for new research and development in the area of solid waste reduction for use of recycling and recovery;
  - reduce environmental degradation and the real costs associated for conventional waste management systems; and
  - create a waste management structure that will allow maximum collaborative efforts between municipal, regional and provincial authorities, and between the public and private sectors.
- .        The Chairmen of the five regions in the Greater Toronto Area (GTA) - Durham, Halton, Peel, York and Metropolitan Toronto - have prepared a collaborative strategy to develop a state-of-the-art solid waste management system to deal with the area's long-term waste disposal system.

CURRENT SITUATION:

- .        The Province assists the Solid Waste Interim Steering Committee (SWISC) to undertake its new responsibilities through the Blue Box and industrial 3Rs programs, market development and waste management master planning.
- .        The proposed approach is in line with the goals of the Ontario government--to reduce waste by 25% by 1992 and by 50% by the year 2000.
- .        The Ministry will continue to emphasize the need to divert waste from landfill and incineration by way of reduction, reuse and recycling.



- . Public consultation is an integral part of each step of the process and a program is currently in place.
- . The long-term system is subject to the requirements of the Environmental Assessment Act (EAA).
- . It is unlikely that any long-term system can be approved in accordance with the EAA on time--before existing landfilling capacity at the Brock West, Keele Valley, and Britannia Road landfill sites are exhausted. Therefore, contingency landfill sites will be needed between January 1, 1992 and December 31, 1996. The province has agreed to process applications for approval through the regular EPA channels. Exemptions under the EAA have been issued for two sites, "P1" in Durham and "V1B" in Peel, and it is anticipated that at least two more are needed. The Province awaits submission of the appropriate applications.
- . Other contingency sites that have been endorsed by the SWISC (but for which no exemptions requests have been received by the Province) are:  
  
 York: A vertical expansion of Keele Valley landfill  
  
 Metro Toronto: M2 in Scarborough; Adams Mine near Kirkland Lake.
- . Legal action to challenge the P1 and V1B exemptions is anticipated.

#### FUTURE ACTION:

- . This item requires an early discussion with the Minister:
  - to review the existing situation;
  - to consider options for alternative approaches and their implications; and
  - to meet with and give direction to the municipalities involved.
- . Options are being developed for consideration.





ISSUE:      Public Consultation on the Future of Waste  
Management - Towards a Sustainable Waste Management  
System

BACKGROUND:

- .      The MOE discussion paper "Towards a Sustainable Waste Management System" was released on July 9, 1990 and circulated to 1,200 parties including the press, federal, provincial and municipal governments, commercial, industrial and trade associations, as well as public interest groups and environmental periodicals.
- .      The discussion paper is intended to provide a framework for ongoing dialogue involving concerned citizens, business, public interest groups and all levels of government about the future of waste management in Ontario.
- .      The highlights of the discussion paper are the four principles of sustainable waste management:
  - reduced reliance on disposal;
  - environmentally secure waste management facilities;
  - timely facility development; and
  - financial sustainability (user pay).

CURRENT SITUATION:

- .      The Ministry has embarked upon a public consultation period from July 9 to October 31, 1990.
- .      Through open discussion with interest groups/associations, the Ministry hopes to hear the public's concerns so a consensus can be reached for improvements to future policies and programs.
- .      Presentations are scheduled to a variety of groups including students, teachers, Association of Municipalities of Ontario, Conservation Council of Ontario, municipal planners, service clubs, product suppliers and interest groups.



#### FUTURE ACTION:

- . Waste Management Branch staff will continue to make public presentations to groups/associations upon request until October 31, 1990.
- . A report will be prepared at the conclusion of the public consultation period that will document all of the comments, both in the form of correspondence received and discussions arising from staff presentations.
- . A presentation will be prepared for late November or early December that summarizes the concerns and ideas expressed by the public about the Ontario Government's waste management programs and policies.
- . Options will be prepared for consideration by senior management that outline a variety of waste management strategies consistent with the expressed goals, principles and waste diversion targets outlined in the discussion paper.
- . This issue needs early review with the Minister to determine whether the Government wishes to proceed with the above process or to withdraw the paper and put forward alternative proposals for public consideration.
- . Options are being developed for consideration.





ISSUE:      Reducing Packaging in the Waste Stream

BACKGROUND:

- .      Packaging constitutes over 30 per cent of waste.
- .      The Environmental Protection Act (EPA) provides authority to regulate packaging with respect to its environmental impact.
- .      Current regulations under the EPA pertain to soft drink and milk containers only.

CURRENT SITUATION:

- .      "OMMRI II: Corporations in Support of Recycling" has been established as a means of ensuring industry's financial and technical support for recycling. OMMRI II is comprised of members from the soft drink, packaging, plastics and grocery industries, and newspaper publishers associations. OMMRI II will contribute to the expansion of the present Blue Box program to collect and recycle more packaging.
- .      The Ministry is a member of the National Task Force on Packaging which has developed six policies, in the form of the National Packaging Protocol (NAPP), to reduce packaging waste. The Task Force is comprised of representatives from the federal government, each of the provinces and territories, industry associations, municipalities and environmental and consumer groups.
- .      The (NAPP) was endorsed by the Canadian Council of Ministers of the Environment (CCME) in March 1990, and the Task Force is currently working on implementation of its policies. The Ministry is fully involved with the Task Force sub-committees on recycling, reuse infrastructure development, communications, regulations, and packaging waste reduction monitoring system development.
- .      The Ministry is a member of: Governments Incorporating Procurement Policies to Eliminate Refuse (GIPPER) whose objective is to develop ways and means of revising government procurement practices and policies with a view to reducing waste from government institutions. GIPPER has representation from federal, provincial and municipal governments.



- . The Ministry provides financial and technical support through its 3Rs funding programs to municipalities, school boards and the private sector to divert packaging waste.

#### FUTURE ACTION:

- . Pursuant to current policy, the Ministry will continue to:
  - develop OMMRI as a means of garnering industry's support for packaging waste diversion;
  - pursue joint initiatives with the Packaging Task Force to deal effectively with packaging on a national level;
  - develop specific programs to encourage 3Rs including regulatory and market-based approaches.
  - support Provincial government procurement policy initiatives with respect to packaged goods, such as one which would stipulate recycled content in packaging.
- . This issue needs early review with the Minister with respect to the proposed stronger regulatory approach.
- . Options are being developed for consideration.



## ISSUE:      **Scrap Tire Management**

### BACKGROUND:

- . At present, Ontario residents discard about 12 million passenger tire equivalents annually (one truck tire equals about 4.5 passenger tires). Of these, approximately 8 million go to landfill or stockpiles.
- . In the spring of 1989, the government announced a \$5 tax on all new tires to help cover the cost of dealing with scrap tires. It is estimated that the tax generates about \$40 million in revenue annually.
- . The importance of proper tire management was illustrated by the tire fire at Hagersville.
- . The Ministry has committed approximately \$20 million to date towards major tire recycling projects over the next five years in the Province.

### CURRENT SITUATION:

- . An inventory of stockpiles across the province has been compiled and owners have been instructed to separate tires into piles of less than 5,000 tires, provide security and provide water for fire fighting.
- . The Environmental Protection Act (EPA) has been amended and now designates scrap tires as a waste and therefore clearly requires stockpile owners to obtain waste disposal site Certificates of Approval. A framework of components of approval that will cover the storage, disposal and processing of all scrap tires is currently under development.
- . A policy was being developed for approval on the capacity threshold level at which a tire incineration proposal will require approval under the Environmental Assessment Act or the EPA. It had been intended that the policy reference a newly developed test protocol for burning scrap tires in cement kilns as a supplementary fuel.
- . The Province has committed \$16 million in fiscal 1990-1991 to support the following initiatives:
  - capital funding for tire recycling plants;
  - technology research and development;
  - market development;



- securing and eliminating stockpiles;
- establishing collection and sorting systems;
- using recycled rubber in asphalt.

. Work is in progress to design and carry out two rubber modified asphalt demonstration projects during 1990 and 1991. Asphalt performance, air quality, and the implications of recycling rubberized asphalt will be examined.

. The Ministry of the Environment established a task force on tire recycling to find short and long term solutions to recycling scrap tires, and allow a forum for information exchange among key stakeholders. The task force is comprised of representatives from the tire industry, municipalities, the environmental community and the Ministry.

. A Scrap Tire Recycling Study is due for completion by the end of September, 1990. It will evaluate recycling technologies as well as potential markets for recycling tires or products from recycled tires. The study is updating data on the number of tires scrapped each year and the number of tires in storage sites. Finally, the study will examine the ways other jurisdictions deal with scrap tires and will recommend short and long term management options.

. The Ministry currently has over 35 proposals seeking financial support for various tire recycling and reuse purposes. The Ministry is meeting with proponents and assessing eligibility of proposals for funding.

. Negotiations are presently ongoing with National Rubber Company Inc. and the Viceroy-Trent Group of Companies to build separate tire recycling plants in Toronto and Lindsay, respectively. A grant of \$7.9 million to National Rubber and \$9.7 million to Viceroy-Trent includes research and development work to be conducted over the next four/five years.

. Present MOE commitments for funding scrap tire recycling initiatives are expected by the proponents to lead to the recycling of close to 20 million tires per year by 1996.

. However, in the short term, bringing existing scrap tire storage sites into fire code compliance will





require disposition of at least a million excess scrap tires for which there is presently no recycling capacity in the province.

FUTURE ACTION:

- . Unless a policy review dictates otherwise, present Ministry directions would lead it to continue:
  - securing stockpiles;
  - financially assisting proposals that utilize scrap tires in rubber products;
  - exploring scrap tire management options.
- . The new government will need to review the tire program in light of the recommendations of the Scrap Tire Recycling Study and emerging pressures at existing non-compliant scrap tire storage sites.



# WATER MANAGEMENT



ISSUE:        **Municipal-Industrial Strategy for Abatement  
Program (MISA)**

BACKGROUND:

- .     MISA was announced in a White Paper (June 1986). Its goal is the "virtual elimination of toxic contaminants in municipal and industrial discharges into waterways".
- .     The goal is to be achieved through a systematic reduction of water pollution at its source with enforceable regulations which become more stringent as abatement technology improves.

Industrial Sectors

- .     Approximately 300 plants and mines which discharge directly into waterways are subject to MISA requirements. These plants and mines are organized into nine industrial sectors.
- .     The MISA program includes two series of regulations: Effluent Monitoring Regulations and Effluent Limits (Abatement) Regulations.
- .     These regulations are applied on a sector-specific basis for each of the nine sectors.
- .     The Monitoring Regulations require dischargers to measure the types, concentrations and total amounts of toxic substances present in their effluents. Resulting data will be used, with other information, to establish Abatement Regulations.
- .     These end-of-pipe discharge limits will be based on Best Available Technology, Economically Achievable (BATEA).

Municipal Sector

- .     The municipal program has two components: the control of direct discharges from municipal sewage treatment plants (STPs), and the control of discharges to municipal sewers from industries (Sewer Use Control Program).
- .     Each component will be defined by regulation.





## CURRENT SITUATION:

### Industrial Sectors

- . All nine industrial sector Monitoring Regulations have been promulgated.
  - The Petroleum Refining sector completed its 12 months of intensive monitoring in November 1989, and results have been published.
  - All other sectors are now undertaking effluent monitoring.
  - The next sector to complete monitoring requirements is the Organic Chemical Manufacturing sector.
- . Economic Profile reports were prepared for each industrial sector. Cost of Monitoring reports, involving plant-specific monitoring cost estimates and analyses of the financial and economic consequences of these costs, were prepared and issued with the Monitoring Regulations.
- . In anticipation of developing Effluent Limits Regulations, an Issue Resolution Process (IRP) was established:
  - Five issues resolution committees consisting of representatives from MOE, industry, municipalities, Environment Canada, and the MISA Advisory Committee (MAC), examined 18 issues.
  - Key issues examined include: QA/QC, Monitoring Data Analysis, Definition of "virtual elimination", Selection of Parameters for Limits, Best Available Technology, Economic Achievability, Limit Setting and Form of Limits, Net Loadings, Toxicity, Flow Measurement Accuracy, Compliance, Monitoring for Assessment, Stormwater, By-passes, and Reporting to the Public.
  - IRP reports were published in June 1990 and released for public review and comment. This public consultation process ends October 31, 1990.



- . Joint Technical Committees (JTCs), which consist of representatives of MOE and industry, have begun to develop Abatement Regulations.

### Municipal Sector

- . Approximately 20 municipalities, accounting for 60% of the province's population, have promulgated sewer use by-laws. These are based on the recently revised Model Sewer Use By-law.
- . Demonstration projects are being undertaken in five municipalities to help develop and refine components of the Sewer Use Program and determine their practicality.
  - The municipalities are: Cobourg, Gananoque, Regional Municipality of Hamilton-Wentworth, Ingersoll, and Thunder Bay.
- . MOE is developing training courses for municipal staff in areas of expertise required to develop and implement a Sewer Use Program.

### FUTURE ACTION:

#### Industrial Sectors

- . The IRP is expected to be completed by late Fall 1990.
- . Limits Regulations for all industrial sectors are expected to be in place by the end of 1992.
  - It is MISA's intent to produce a generic abatement regulation in conjunction with the Petroleum Sector Regulation. Internal reviews are ongoing. Sector-specific protocols will be produced for sectoral regulations.
  - A template regulation has been developed for the Petroleum Sector, and will be released for industry review and comment in October 1990 subject to internal (MOE) agreement.
  - A draft Petroleum Sector Abatement Regulation should be available for public review and comment by the end of 1990.



### Municipal Sector

- . Completion of the municipal demonstration projects is expected by the end of 1990.
- . Completion of all municipal training programs is expected by early 1992.

### General

- . The MISA program will require review by the Minister in order to determine appropriate action required to meet the government goal of zero-discharge by 2000.
- . Options are being developed for consideration. Factors to be considered include: timing implications, degree of regulatory action, and MISA program restructuring.



ISSUE:      Drinking Water Protection Program: Development of a Drinking Water Protection Program that will Provide Assurance of the Continual Supply of Safe Drinking Water in Ontario

BACKGROUND:

- .      The Ontario Drinking Water Objectives (ODWOs) are perceived by the public as not providing adequate protection of drinking water quality because they are not enforceable standards.
- .      The public has consistently requested the establishment of additional drinking water quality standards, and public participation in the standard setting process.
- .      The ODWOs were last published in 1983. A revised edition of the ODWOs, which will include approximately 100 objectives, is currently in preparation.

CURRENT SITUATION:

- .      The Drinking Water Surveillance Program (DWSP) currently provides detailed (180 parameters) monitoring of 75 of 486 municipal water plants, covering 80% of Ontario's population.
- .      There are 3,000 to 4,000 private communal water systems and about 500,000 private individual wells that receive limited sampling for water quality objectives.
- .      MOE does not currently regulate bottled water quality or the quality of water produced by home water treatment devices.
- .      There is no comprehensive compliance program for drinking water in Ontario.
- .      A Drinking Water Protection Program has been in the process of development. The proposed program involves:
  - (a)    considering the establishment of legally enforceable drinking water quality standards;
  - (b)    formally establishing a standard-setting process for drinking water objectives ensuring public participation through the Advisory Committee on Environmental Standards (ACES);





- (c) expanding the Drinking Water Surveillance Program to cover all municipal water treatment systems in the Province;
- (d) developing and implementing a compliance assessment program to provide assurance of drinking water quality;
- (e) implementing or enhancing programs to protect drinking water sources and ensure the production of quality drinking water in the Province;
- (f) developing legally enforceable regulations governing the design, construction, operation and maintenance of water treatment plants and water delivery systems;
- (g) developing legally enforceable minimum treatment standards;
- (h) establishing a mandatory training, educational and certification program for water treatment plant personnel; and
- (i) considering whether or not MOE should play a role in regulating bottled water quality and/or the quality of water produced by home water treatment devices.

FUTURE ACTION:

- . The new government will need to review the new program proposals.



# AIR MANAGEMENT



ISSUE:      **Clean Air Program (CAP)**

BACKGROUND:

- .     A review of the Ministry's basic tool for the protection of air quality - Regulation 308 under the Environmental Protection Act - was carried out in consultation with representatives of industry, interest groups and academia.
- .     The review concluded that the existing Regulation is inadequate for the control of toxics, primarily because it relies on dispersion rather than control at source.
- .     In 1987, the Ministry released a discussion paper which described options for an updated approach to air pollution control. Following receipt of public comment, a new regulatory program was developed - the Clean Air Program (CAP).
- .     The Clean Air Program was released for a six-month public comment period on August 16, 1990.
- .     CAP is designed to achieve systematic reduction of toxic emissions to air, with the ultimate goal of virtual elimination.
- .     The principal elements of the proposed Clean Air Program include:

(i)    Contaminant Classification

Contaminants will be assessed and classified as Level 1 (high hazard); Level 2 (medium hazard); Level 3 (low hazard, primarily "nuisance").

(ii)   Emission Limits

Emission limits imposed will correspond to the contaminant Level of Concern:

Level 1 - Lowest Achievable Emission Rate (LAER);

Level 2 - Best Available Control Technology  
            Economically Achievable (BACT-EA);

Level 3 - Reasonably Available Control Technology  
            (RACT).





(iii) Ambient Air Standards

Ambient air standards - which are legally enforceable - will be established as a "second line of defence" to protect community air quality.

(iv) Two-Part Certificates of Approval

All new or modified facilities under CAP will be required to apply for a site-specific two-part Certificate of Approval: the first part for construction; the second, renewable every ten years, for operation.

Existing facilities will only require a Certificate of Approval to operate (also renewable every ten years).

Certificate of Approval conditions will impose emissions testing and monitoring requirements.

"Class" Certificates will be developed to expedite the approvals process for similar facilities, such as dry cleaners, print shops and fast food outlets.

(v) Source Registration

Owners of significant emitters will be required to provide annual reports respecting the quantity of their emissions of specified contaminants.

(vi) Application of the CAP Regulation

CAP applies in its entirety to all stationary facilities except:

- those falling under the Small Source Designation Limit;
- those regulated under other Regulations, such as the Countdown Acid Rain Regulations (such facilities will not be required to apply CAP controls in respect of the contaminants which are already the subject of their existing Regulation, but will have to apply CAP to other contaminants);
- those which will be subject to Codes of Practice, such as farming;



- small sources related to comfort heating, small experimental facilities, residential sources of wood smoke.

(vii) Implementation

Ten-year phase-in, commencing with emitters of eight Level 1 contaminants for which good data and rationales already exist.

Resources required for implementation are estimated to total \$30 million, including approximately 300 staff.

A series of economic studies and a comprehensive assessment of findings has led to the conclusion that the macro-economic consequences of CAP are modest. The phase-in will allow industries time to adjust and plan for their environmental expenditures.

CURRENT SITUATION:

- . The Clean Air Program is currently undergoing public scrutiny. A series of presentations and public meetings is under development.

FUTURE ACTION:

- . Should program changes be contemplated, an early decision and announcement would be required to meet public expectations.



ISSUE:      **Vehicle Emissions Strategy**

BACKGROUND:

- .     The Ministry has developed a strategy on the reduction of vehicle-related air pollution in Ontario in consultation with a number of affected Ministries: Transportation (MTO), Consumer and Commercial Relations (MCCR), and Solicitor General (MSG).
- .     The strategy includes five areas:
  1.    The development of a program that requires:
    - a.    evaporative control devices to be installed on all gasoline storage and distribution facilities having a throughput of more than one million litres/year and on all tank vehicles with a capacity over 20,000 litres. Certain exemptions exist.
    - b.    all owners of storage and distribution facilities (except farms) to register their emissions, apply for Certificates of Approval (Cs of A) and source test their facility for performance.
    - c.    compliance within two to four years depending on location.
  2.    The development of a program to control emissions during the refuelling of vehicles (consultation is underway).
  3.    The development of a program to inspect pollution control equipment on all cars and light duty trucks upon change of ownership as part of the vehicle safety inspection.
  4.    The development of a program for the implementation of a mandatory regular inspection and emission testing of pollution control equipment of cars and light duty trucks.
  5.    The development of a program for the enforcement of controls on heavy diesel vehicle emissions.
- .     To complement the strategy, the Ministry is investigating the feasibility of reducing the gasoline



volatility limit from 10.5 psi (72 kpa) to 9.0 psi (62 kpa) in summer months. This will help reduce the generation of ground level ozone.

- . The Ministry is also in the process of producing a draft study report on Alternative Fuels.
- . Ministry representatives met with the Canadian Urban Transit Association (CUTA) in July and discussed measures to be introduced to promote public transit as a means to reduce use of cars, vehicle miles travelled and thus pollution from mobile sources.

#### FUTURE ACTION:

- . The Ministry will continue to provide full support to the Ministry of Transportation (and to the MTO/MOE/MCCR/MSG Steering Committee) in the development of an inspection/ maintenance program, in enhanced truck smoke enforcement/development and in the development of a remote-sensing exhaust analyzer.
- . Resource implications for each ministry will be analyzed.
- . MOE will ensure coordination of the efforts of all agencies involved (MTO, MCCR, MSG) and start monitoring the effectiveness of the MTO inspection program in reducing HC, CO and NO<sub>x</sub> emissions.
- . A long-term strategy will be developed which would include other effective measures for the control of vehicle emissions, e.g., promotion of alternative fuels and low-emission vehicles; reduction of the use of cars (and vehicle miles travelled) through traffic and parking controls, by car-pooling, by increased use of public transport, by motor fuel taxing, pricing and subsidy policies.
- . MOE will assume a leading role in coordination of this new vehicle emission control strategy.
- . This program should be reviewed at an early date and the program direction confirmed or revised.





# ENVIRONMENTAL ASSESSMENT



ISSUE:      **Environmental Assessment Program Improvement Project**

BACKGROUND:

- .      The Environmental Assessment Program Improvement Project (EAPIP) was publicly launched in early 1988. Its aim is to streamline and make more effective the process under the Environmental Assessment Act.
- .      The project has involved broad consultation through an Inter-Ministry Liaison Committee, a Public Advisory Group, municipal organizations, environmental groups, and public open houses across the Province.
- .      Originally it was thought that the recommendations resulting from EAPIP would be brought forward in two phases: Phase 1 was to concentrate on relatively straightforward administrative changes; Phase 2 was to involve a discussion paper outlining more controversial reforms.
- .      As a result of the perceived urgency with completing the overall reforms, both phases have now been combined in a discussion paper titled "Toward Improving the EA Program" which awaits public release. The paper deals with process.
- .      Mr. Bradley requested the Environmental Assessment Advisory Committee to conduct the public review process when the paper is released.

OPTIONS:

- .      Review the current paper with a view to:
  - (a)    early release to allow for implementation of streamlined procedures:
    - issue of application to private sector to be dealt with in a second phase reform, thus allowing for public consultation on this aspect and experience being gained with these new procedures.
  - (b)    delay release and add the issue of private sector application as part of this reform.



FUTURE ACTION:

- . Decisions are required on the nature and the timing of the public consultation and whether or not to fast-track specific reforms.



ISSUE:      Ontario Hydro's Demand/Supply Plan EA

BACKGROUND:

- .     The Environmental Assessment of Ontario Hydro's Demand/Supply Plan has been submitted, the government review completed, and the matter referred to the Environmental Assessment Board to decide upon the acceptability of the EA and approval of the undertaking. The Ministry's committed to ensuring a timely and effective review by the Environmental Assessment Board.
- .     There have been preliminary meetings of the Environmental Assessment Board through which parties to the hearing have been identified.
- .     Intervenor funding is being allocated by the Environmental Assessment Board (preliminary funding has been allocated and the Board's decision on further funding of parties is expected in early October).
- .     By the time the decision was taken to subject the Plan to review under the EA Act, Hydro's projected dates by which new supply facilities would be "needed" have served to provide a very tight schedule for the review and approval process.

CURRENT SITUATION:

- .     In dealing with the sought after approvals, the Environmental Assessment Board will be establishing corporate directions for Ontario Hydro in meeting its mandate (e.g., the approaches and technologies to be used in addressing projected demand for electricity, the relative mix of approaches and technologies, the extent of reliance on the private sector).
- .     The Board is also likely to be put in the position of reviewing the adequacy and appropriateness of the public policy framework within which Ontario Hydro operates and develops its policies, plans and programs.
- .     As required by the EA Act, the Board is obliged to rule on the adequacy of the EA as a basis for a decision and to decide whether, on balance, approval of the undertaking would be in keeping with the purpose of the EA Act.





- . Hydro cannot proceed with new nuclear generating stations without approval under the EA Act.
- . There has been a recent decline in projected electrical load growth. The decline in projected load growth will provide more breathing room for the EA Board to carry on its deliberations.
- . Although the government review has been completed and is a public document, the government has not taken a formal position on the issues of concern or interest to it before the Panel.
- . The government has not yet taken a position on the appropriate form of representation of the government before the Panel; that is whether Ministries will represent themselves or whether there will be a single government counsel representing the Ministries.

#### FUTURE ACTION:

- . The more fundamental issue for the government is to determine whether it wishes Ontario Hydro to proceed now or whether it wishes to develop a new policy context and ask Hydro to resubmit its EA to reflect that new context.
- . October 3, 1990: An appeal by the Native Council of Canada with respect to the Intervenor Funding Panel's denial of funding to them is to be heard in Ottawa by the Supreme Court. Part of the relief requested by the appellants is a delay of the main hearing pending disposition of their appeal. Counsel need to know whether a position will be taken on October 3rd and if so, what that position will be.
- . November 13, 1990: The government is to submit their interrogatories and witness statements to Ontario Hydro and the other parties.
- . January 7, 1991: This is the presently scheduled starting date for the hearing.
- . The Ministry proposes the following actions:
  1. That there be a meeting of the "key" Ministries: that is, Ministry of the Attorney General, Ministry of Energy, and Ministry of the Environment as soon



as is practically possible to discuss the government position and role in the hearing and the issue of preparation.

2. That the Environmental Assessment Board be advised that the government may not be in a position to prepare its witness statements and interrogatories by the presently set deadline of November 13, 1990, unless instructions can be given to counsel in the next few weeks.



# LAND USE PLANNING



ISSUE:      **Greater Toronto Area Land Use Issues**

CURRENT SITUATION:

.      Rapid growth in the 1980's in Ontario has placed tremendous pressure on the province's ability to provide basic supporting infrastructure. Present demands on hard services such as water, sewage and waste disposal are rapidly reaching or have exceeded the capacities of these infrastructure facilities which were designed in the 60's and 70's. Decisions regarding future infrastructure additions will have long term fiscal and economic development implications.

Seaton Community

.      The province (Ministry of Government Services) has considerable land holdings in the north Pickering area. The Ministry of Housing is proposing to develop a Seaton Community involving mixed land uses. The North Pickering Development Corporation has been formed to be responsible for the planning and disposal of land.

.      Servicing capacity through the York/Durham system has been reserved for these lands.

.      Sewers could be in place about 18 months after the decision to proceed is given and would cost an estimated \$3.2 million to connect to the York/Durham system.

-      Water supply is to be from Durham with an estimated cost of \$12.5 million, not including expansion of the supply, to construct a watermain, reservoir and booster pumping station. This cost is related to servicing an ultimate population of approximately 200,000.

Greenlands/Oak Ridges Moraine

.      The report released by Ron Kanter entitled, "Options for a GTA Greenlands Strategy" identifies areas to be included in a GTA greenlands system and options for protecting those areas including land-use planning and development controls, acquisition and stewardship.





- . In support of the greenlands strategy, the government announced an expression of provincial interest related to land-use planning and development and the significance and sensitivity of the Oak Ridges Moraine.
- . The MNR in consultation with MOE and MMA is developing guidelines to assist in the review of documents within the Oak Ridges Moraine.

#### Urban Structure Concepts Study

- . A Study was commissioned by the Greater Toronto Coordinating Committee on growth management options. This study is currently under review by Regional governments, local municipalities, public and interest groups. The OGTA has requested comments by agencies by the end of September so that a provincial position can be developed some time in October.

#### Royal Commission on the Future of the Toronto Waterfront

- . The Commission's Second Interim Report - Watershed - was released in August 1990. The Commission has taken an ecosystem approach to its consideration of the waterfront, and has defined its area of interest as the Greater Toronto Bioregion, bounded by the Niagara Escarpment on the west, the Oak Ridges Moraine to the north and east, and Lake Ontario to the south.
- . The Report contains 80 recommendations, a large proportion of which are of direct interest to the Ministry of the Environment.
- . The Ministry must consider its response to the Second Interim Report. In the meantime, Commissioner Crombie is preparing a workplan for submission of his final report in Summer 1991.

. Most of the above initiatives reflect values compatible with those of the Ministry of the Environment. For MOE, once directions have been determined and priorities set, the issue will be one of available resources to contribute to these objectives.



# WATER AND SEWAGE INFRASTRUCTURE



ISSUE:      **Proposed Ontario Water and Sewer Services Corporation**

BACKGROUND:

- .      The April 24, 1990 Provincial Budget announced a new Water and Sewer Crown Corporation would be established early in 1991.
- .      Existing responsibilities and funding for water and sewage utility operations and loans and grants for water and sewage construction would be transferred from MOE to the new agency. The new Crown Corporation would report to Cabinet through the Minister of Municipal Affairs. Environment would retain the responsibility for setting and enforcing standards for these systems.
- .      Establishment of the Corporation would reduce the MOE Budget by 48% (\$308.5 million) and staffing by one-third (1,056).

OBJECTIVES:

- .      Eliminate conflict of operator/regulator. MOE operates utilities and also sets and enforces standards for them.
- .      Address the growing investment needs (without negatively impacting the deficit) through off balance sheet financing. The Corporation would borrow on its account backed by a Provincial guarantee.
- .      Facilitate the provision of new inter-jurisdictional systems that could support Provincial development objectives.
- .      Move to full cost pricing on an ability to pay basis, with Provincial subsidies to avoid large rate differentials particularly in smaller communities.
- .      Minimize negative reaction of municipalities.

CURRENT SITUATION:

- .      James MacLaren appointed Chairman - Designate.
- .      Increased costs of setting up a new separate administration would be passed on to municipalities.



Legislation to establish the Corporation is being drafted.

OTHER POSSIBLE MODELS:

- a. Status Quo - Environment would retain these responsibilities (Municipalities are encouraged to operate facilities if feasible)

PROS: Avoidance of the problems of establishing a separate agency - increased costs of separate offices, severance and seniority issues.

MOE staffing and funding would be maintained.

CONS: The conflict of interest would remain.

Expenditures would remain on government books.

- b. Crown Corporation reporting to the Minister of the Environment

PROS: The conflict of interest would be solved in a "legal" sense.

The Minister of the Environment would remain accountable for the Corporation consistent with his or her responsibility for water quality.

Growing investment needs for infrastructure could be met by borrowings of the Corporation (backed with a Provincial guarantee). This could limit the impact on Provincial budgetary expenditures and on the Provincial deficit.

Size of MOE budget would be maintained, reducing negative publicity.

CON: All the problems of creating a separate entity - increased costs of separate offices, severance and seniority issues remain.





c. Crown Corporation reporting to a Minister other than Environment, with grant responsibilities remaining with the Minister of the Environment

PROS: The Ministry of the Environment retains grants as a vehicle of public policy.

- budget reduction to Environment would be minimized, reducing negative publicity;
- operator/regulator conflict solved.

CON: See above problems in creating a separate entity.



## OTHER CORPORATE ISSUES



ISSUE:      **Environmental Bill of Rights**

BACKGROUND:

Mrs. Ruth Grier's Bill 12, an Act respecting Environmental Rights in Ontario, received First Reading on May 15, 1989 and Second Reading on June 29, following which it was referred to the Committee of the Whole House.

CURRENT SITUATION:

Bill 12 does not regulate activities which have or may have an environmental impact. Its principal purpose is to empower the public to play a stronger role in environmental protection through:

- opportunity for public comment on instruments such as orders, permits and regulations;
- the ability to initiate investigations of activities which are harmful or potentially harmful to the environment;
- the right to take legal action to protect the environment without having to prove personal loss or damage (standing);
- the availability of "class action" remedies, whereby a legal action can be brought by one or several individuals on behalf of numerous persons having the same interest. (The Attorney General introduced a Bill of general application dealing with Class Actions, although this died on the Order Papers after First Reading, when the election was called); and
- the protection of employees who "blow the whistle" on their employers.

Bill 12 was not called for review by the Committee of the Whole House, and died on the Order Paper when the election was called.



FUTURE ACTION:

- . This issue should be quickly reviewed with Minister and directions given. The Ministry anticipates this matter as a Throne Speech item with early action in the upcoming session.





ISSUE:      **Cleansweep Lottery Program**

BACKGROUND:

- .    The Cleansweep Lottery has been authorized for funding:
  1.    local community environmental clean-up projects;  
      and
  2.    clean-ups of existing water quality problems in Ontario's waterways, where there is no existing funding or program to deal with the issue and where the "polluter pays" principle cannot be put into effect.
- .    The Lottery Corporation is anticipating proceeds net of prizes and administration costs of up to \$20 million for the first part year, \$30 million in the second year, and \$40 million in the third year.

CURRENT SITUATION:

- .    Ministry staff are preparing a marketing and communications plan to ensure maximum public awareness of the programs.
- .    Cleansweep has already been successfully launched with substantial media coverage and advertising promoting the use of funds towards environmental protection.
- .    Interest in the use of proceeds from the "Cleansweep Lottery" remains high as the Research and Technology Branch has compiled a mailing list of 200 individuals and organizations interested in Cleansweep grants. Six potential proposals have been received for consideration.
- .    The environmental issues targeted for lottery revenues were selected for three reasons. First, they are vitally important, highly visible and more easily appreciated by the public. Secondly, they represent initiatives for which concrete action and identifiable returns can be demonstrated within a relatively short time period. These two reasons are critical to motivate that segment of the population who do not normally play lotteries. Thirdly, our treatment of these environmental issues is in its formative stages, and program enhancement would allow results to occur faster.



- . Lottery revenues will vary from year to year and the funding commitments must be equally flexible. Projects selected to receive lottery funds will generally be completed in one year, or have firm commitments for funding from other parties after one year.

#### FUTURE ACTION:

- . Decisions are required on the allocation of Cleansweep Funds to environmental programs.

#### **OPTION 1: Apply the new funds from Cleansweep to existing programs.**

##### Pro:

- . Could assist in the accelerated implementation of ongoing MOE programs.

##### Cons:

- . Would not address current problems for which there are no programs in existence.
- . Program becomes vulnerable to variance of Lottery revenues when a consistent level of funding is needed.
- . Would be seen as simply a topping up of existing programs with no new environmental initiatives planned.

#### **OPTION 2: Apply funds generated by Cleansweep as planned.**

##### Pros:

- . The net revenues generated by Cleansweep would be earmarked for the Ministry of the Environment.
- . Allows the Ministry of the Environment to take decisive action on long standing issues of public concern which current priorities do not allow to be funded.
- . Allows the public to demonstrate their willingness to pay more for environmental protection.



- . Allows increased Ministry visibility to the public on environmental issues and increases awareness and action on the environment.

Con:

- . May result in the decline of revenues to other lotteries, and therefore fewer funds flowing to other programs.

**OPTION 3: Discontinue Cleansweep.**

Pro:

- . Will disassociate the Ministry's desire for real environmental clean-up from the perception of lotteries as a regressive, albeit voluntary, tax as well as from the perception of "gambling on the environment".

Cons:

- . No advantages for environmental clean-up activities.
- . The Lottery is already operational, and expectations are high from the public and interest groups who may be eligible to receive proceeds from the new lottery.
- . Anticipation is high as potential applicants making inquiries to the Ministry are presently developing ideas and project proposals in anticipation of the program being operational in the near future.

Should a decision be made to continue with Cleansweep, criteria and administrative procedures for allocating funds will need approval at Cabinet.



MAJOR ISSUES

MINISTRY OF THE  
ENVIRONMENT





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# WASTE MANAGEMENT



ISSUE:      **Comprehensive Funding Program (CFP)**

BACKGROUND:

- . In June 1987, MOE announced the \$9 million CFP which provides financial assistance to municipalities and the private sector for waste management activities.
- . Activities funded have been organized into treatment/disposal and 3Rs - municipal and industrial waste reduction, reuse and recycling.

Treatment/Disposal

- . The Waste Management Improvement Program (WMIP) provides funds to municipalities for existing sites to: upgrade sites, close sites properly, and investigate and propose remedial works.
- . Waste Management Master Plan Program provides funds to groups of municipalities for long range (20 years) planning for waste management.
- . A Financial Assistance Program (FAP) enables municipalities to implement landfills, transfer stations or processing facilities. Eligible activities include design, hearings and approvals, land, construction, and equipment costs.

Municipal 3Rs

- . The Municipal Recycling Support Program provides funds to municipalities to initiate recycling programs.
- . The Municipal Reduction/Reuse Program provides grants for up to 50% of promotion costs incurred by municipalities for activities which are aimed at changing consumer attitudes or behaviour with respect to waste generation habits (e.g., home composting and discouraging purchase of overpackaged goods). Grants for creative/innovative material development of up to \$25,000 are also available.
- . The Municipal Recovery Program provides grants of up to one-third of the costs for establishing facilities to process mixed wastes to produce useful materials such as compost, refuse derived





fuel (RDF) and ferrous metal. Research, development and demonstration projects may be funded up to 100%.

### Industrial 3Rs

- . The Industrial 3Rs Program provides assistance for all industrial and commercial sectors to take advantage of new opportunities for waste diversion from disposal. Activities eligible for funding include feasibility studies, process or equipment modification or evaluation, demonstration of technology and research. The program provides grants for capital and commissioning costs that match the proponent's equity (to a maximum of 50%) as well as demonstration, evaluation and research costs (to a maximum of 100%).

### CURRENT SITUATION:

- . A Selection Committee prioritizes all FAP and WMIP applications considering the size of the municipality, environmental considerations and 3R initiatives. Funding criteria and budget allocations promote the grouping of municipalities and remove overlap between programs.
- . Changes to administrative procedures for FAP and WMIP grants are being made to help provide municipalities with advance payment of their grant funds.
- . Several municipal recovery projects are in the development stage for possible funding including RDF demonstration, leaf composting, sludge composting and municipal waste composting. A composting demonstration project has begun in Guelph for organic wastes from residential and commercial-industrial sources.
- . Under the Industrial Program over 200 projects have been assessed and funds have been committed of which the following are some examples:
  - funding of tire recycling plants and research into development of markets for recycled tires;
  - testing the use of recycled plastic in the production of plastic covers and containers in the computer and cosmetic industries;



- funding of cloth diaper services;
  - bailers for recycled paper;
  - hospital waste study; and
  - upgrading an existing cardboard recycling facility to process additional corrugated cardboard in the London area.
- . Approximately 100 additional industrial 3Rs funding applications are currently under review and it is estimated that three quarters of these proposals will likely be funded.
  - . The 1990-91 budget for the 3Rs components of the Comprehensive Funding Program is \$48.0 million.

#### FUTURE ACTION:

- . MOE will continue to evaluate program effectiveness especially for new funding programs, and revise funding criteria as required.
- . Municipalities and industries will continue to investigate and implement new approaches to divert wastes from disposal, such as a wet/dry collection and processing systems for municipal waste.

#### WASTE MANAGEMENT BRANCH



ISSUE:      **Municipal Recycling in Ontario**

BACKGROUND:

- .     The MOE supports municipal recycling projects through the Municipal Recycling Support Program (MRSP).
- .     The MRSP comprises seven distinct grant components which subsidize capital purchases and operational expenses associated with the recycling project. This program also provides grants for demonstration projects, educational programs and feasibility studies.
- .     Typically, the projects funded involve collection of recyclables at curbside from single family dwellings. Projects using depot collection systems in rural areas are also funded.
- .     Materials recovered by recycling projects are typically newspaper, glass containers, metal cans and PET soft drink containers.
- .     OMMRI (Ontario Multi-Material Recycling Inc.) also provides funds to municipalities for recycling. OMMRI is an industry group representing the grocery distributors, grocery products manufacturers, printing paper users, the packaging industry, the plastics industry and the soft drink industry.
- .     The OMMRI commitment for the period 1990 to 1995 is \$45 million.
- .     OMMRI financial assistance to municipalities is primarily through capital grants and demonstration projects.

CURRENT SITUATION:

- .     Over two million households participate in the Blue Box program.
- .     Total spending by the MOE under the MRSP from FY 1986-87 to FY 1989-90 has been \$29.7 million.
- .     Statistics for FY 1989-90:
  - the MRSP expenditure was \$17.7 million;
  - one hundred and seven recycling projects comprising 340 municipalities were funded under MRSP; and



- over 250,000 tonnes of materials were diverted from landfill.

. The FY 1990-91 budget allocation is \$21.2 million.

#### FUTURE ACTION:

- . Future MOE strategy will focus on expanding the recycling system in both participation and types of materials recovered.
- . The MOE will promote the inclusion of fine paper, mixed plastics, film plastics, corrugated cardboard and boxboard in municipal recycling projects. The MOE is supporting several projects which will investigate the recycling of these new materials. These initiatives include:
  - film plastics recycling demonstration project in the City of Peterborough;
  - fine paper recycling demonstration project in Durham Region; and
  - boxboard, cardboard and mixed plastics collection demonstration project by the Centre and South Hastings County Recycling Association.
- . Municipalities will be encouraged to collect and recycle large items such as appliances and furniture. Such a program is currently underway in the City of Sarnia.
- . The municipalities will be made aware that the MOE is willing to consider funding any initiative which is municipally run and which diverts solid waste from landfill through recycling.
- . The MOE will promote recycling in multi-family dwellings (apartment buildings) and in rural areas through depot projects. The MOE is supporting a project to demonstrate the use of bulk "dome" type containers for the collection of recyclables from highrise buildings in the City of Scarborough.
- . Municipal collection of recyclables from commercial and industrial buildings will be supported under the MRSP.

#### WASTE MANAGEMENT BRANCH





ISSUE:      **Biomedical Waste Management**

BACKGROUND:

- . Ontario generates approximately 10,000 tonnes of biomedical waste per year. Due to the lack of sufficient infrastructure to handle this volume of biomedical waste, approximately 6,000 tonnes of the waste is exported out of the Province for disposal (Quebec and U.S.A.). The majority (90%) of exported waste goes to Decom's incinerator in Gatineau, Quebec.
- . A total of 122 hospitals (out of 225) have on-site incinerators to dispose of their biomedical wastes. Of these, 96 hospital incinerators were built prior to 1986, and have no air pollution control.
- . In 1986, the Ministry of Health (MOH) instituted a \$15 million funding program to assist hospitals replace or upgrade deficient incinerators. Funding was committed to 54 hospitals, however, only 21 new hospital incinerators were built.
- . Hospital incinerators operating prior to December 31, 1985, are allowed to accept biomedical wastes from off-site without the need for environmental approval under a provision of Regulation 309.
- . The Ministry requires new hospital incinerators to be equipped with state-of-the-art pollution control and to comply with all MOE regulatory requirements.
- . An advisory committee on Biomedical Waste was formed in 1988 to consider the installation of regional facilities.

CURRENT SITUATION:

- . There are six approved commercial carriers that service biomedical waste generators in Ontario. Hospitals without operational incinerators in Northern Ontario store biomedical waste for extended periods due to limited commercial carrier service. Small quantity generators of biomedical waste have very limited commercial carrier service anywhere in the Province.
- . MOE contracted air and ash emissions testing on five uncontrolled and two controlled hospital incinerators. Except for one hospital incinerator (Women's College),



emission levels are within the point of impingement limits set forth under Regulation 308.

- . MOE and MOH are working towards the preparation of a strategy outlining immediate, short and long term actions to manage biomedical waste in Ontario. The strategy outlines a phase out of pre-1986 hospital incinerators by 1995 and the need for implementing a 3R program for hospitals.
- . MOE and MOH have identified 10 priority areas and agreed in principal to plan and construct new regional facilities.
- . A test facility to shred and disinfect the waste prior to landfill/recycling is under construction. This technology will likely be tested later this year.
- . A committee has been formed to redefine the term pathological waste under Regulation 309 to make it waste-specific and enforceable. Upon the promulgation of the new definition, the Guideline document for the handling and disposal of biomedical waste will be revised and risk analysis will be conducted.

#### FUTURE ACTION:

- . The Advisory Committee Report on Biomedical Waste, making recommendations towards the installation of regional facilities, is expected to be released at the end of this year.
- . Pending approval of the MOE/MOH proposed strategy, staff from both Ministries are discussing the necessary actions to implement the recommendations, including possible release of the strategy to the public.
- . Proposals from three private sector proponents have been submitted under the EA Act for biomedical waste management facilities. These proposals will be subject to CAP and MISA.

#### WASTE MANAGEMENT BRANCH



ISSUE:      Chlorofluorocarbons (CFCs) and Halons

BACKGROUND:

- . Over the past 20 years, the ozone layer has shrunk by an estimated one to three percent, mainly because of the effect of certain man-made ozone depleting substances such as CFCs and Halons.
- . CFCs are a family of long-lasting synthetic chemicals that contain carbon, chlorine and fluorine. They were developed 60 years ago as a substitute for ammonia in refrigerators, and are today used as coolants in refrigerators and air conditioners, as blowing agents in foam product manufacturing, as cleaning solvents for electrical components, as slurries in aerosol sprays, and in hospital sterilization procedures.
- . Halons are also ozone depleting chemicals related to CFCs but they contain bromine. They are used almost exclusively in fire protection equipment.
- . Ontario represents one-half of Canada's consumption of CFCs.
- . Action to protect the ozone layer was initiated by the United Nations Environment Programme (UNEP) in 1977. After several years of negotiations, an agreement was signed in September 1987. This agreement, the "Montreal Protocol" has since been ratified by over 60 countries and was amended in June 1990. The amendments resulted in an international commitment to ban the manufacture of these chemicals by 2000.
- . Ontario has been an active participant in an ad hoc working group under CCME to harmonize the approach of provincial and federal jurisdictions. MOE has participated in the development of several documents including the Code of Good Practice for the Refrigeration Industry, the Strategy for Regulatory Harmonization and the National Recovery/Recycling Action Plan.

CURRENT SITUATION:

- . Ontario took the lead regulatory approach in Canada to control the use of CFCs when the Ozone Layer Protection amendment became Part V-A of the Environmental Protection Act on June 28, 1989. This legislation set



the framework for MOE to pass regulations for the control of CFCs and Halons.

- A ban on the manufacture and import of products that employ CFCs as propellants in aerosol sprays or as blowing agents in the manufacture of foam packaging came into effect July 1, 1989. Regulation 394/89 was passed specifying objectives to meet the July target date.
- The ban was expanded in August 1990 to include: aerosol propellants for all containers (10 kg. or less) of a designated ozone depleting substance and a phase-out in the use of CFCs in the manufacture of flexible foam and rigid insulation foam between September 1, 1990 and the end of 1993. (The final 100% elimination in 1993 is dependent on the commercial availability of the alternative chemicals).
- An infrastructure for the collection and movement of refrigerants as a first step to a recovery/recycling program was instituted. In addition, this regulation initiates a mandatory recovery/recycling program for mobile air conditioning systems, and refrigerated vehicles effective July 1, 1990.
- These initiatives will result in a 50% reduction in the use of CFCs in Ontario by the end of 1993.

Due to the complexity of these regulations, MOE has developed a "Compliance Guide for Industry", to help all affected parties understand the requirements of these and previous CFC regulations. An advance copy of the guide will be circulated with the regulations early in September 1990.

#### FUTURE ACTION:

Ontario will continue to regulate the use of CFCs and to force the use of new technologies where technically and economically feasible. Activities include:

- consultation with the electronics, drycleaning industries;
- review technology of CFCs as sterilant gases;





- review technology of the use of methyl chloroform and carbon tetrachloride (newly added to the Montreal Protocol); and
- expand and refine the approach to reclamation and recycling of CFCs.

#### WASTE MANAGEMENT BRANCH



ISSUE:        Demand for Old Newspaper and the Potential Impact  
                 of a Strike at Quebec and Ontario Paper, Thorold

BACKGROUND:

- . Demand for old newspaper (ONP) is projected to increase from 187,000 tonnes in 1989 to 356,800 tonnes in 1991.
- . In 1991, the principal consumers of old newspaper for the purpose of de-inking will be Atlantic Packaging, and Quebec and Ontario Paper. They will require up to 350,000 tonnes annually of ONP and magazines to produce competitive grade de-inked newsprint.
- . Other consumers of ONP, boxboard, and construction materials, will continue to use up to 40,000 tonnes annually.
- . New de-inking plants planned by Canadian Pacific Forest Products in Thunder Bay and Gatineau, Quebec will require up to 180,000 tonnes of ONP annually by 1992. Proposals are also being considered by Abitibi, Kruger and Cascades.
- . Projected supply of old newspapers from Ontario recycling communities (urban, rural and apartment) is expected to reach 300,000 tonnes in 1992, up from 246,000 tonnes in 1989. Offices and institutions could contribute an additional 150,000 tonnes.
- . Estimated newspaper consumption of total newsprint production in Ontario is 600,000 tonnes annually of which 400,000 tonnes are consumed directly by Ontario dailies.
- . Only the Sun and the Financial Post consume de-inked newsprint and the other Ontario dailies are committed to purchase de-inked newsprint as part of their support for the Ontario Multi-Material Recycling Inc. (OMMRI).
- . The major market for de-inked newsprint from the Ontario pulp and paper industry is likely to continue to be the United States.

CURRENT SITUATION:

- . Ontario municipalities sell the ONP collected from their Blue Box only to Quebec and Ontario Paper in Thorold for direct consumption at \$40 per tonne or offshore sale at an estimated \$10 per tonne.



- . Labour negotiations broke down and the company was placed on strike August 14, 1990.
- . With the strike, Ontario municipalities could generate up to 60,000 tonnes of ONP over the next three months and Q & O would neither export or consume it.

#### FUTURE ACTION:

- . To deal with the effects of the strike where Ontario municipalities are unable to store, bale and arrange offshore sales or alternative uses of ONP generated during the strike, the Ministry and OMMRI have entered into a funding arrangement to coordinate efforts to alleviate the ONP problem by supporting the market.
- . Municipalities can approach OMMRI for direction in arranging sales or alternative use for 10 to 20% of ONP normally consumed by Quebec and Ontario Paper.
- . Municipalities will be reimbursed for most extraordinary expenses such as hauling, baling, warehousing, containerization and any related costs necessary to sell their Blue Box collected ONP during the strike.



ISSUE:      **Energy from Waste Incineration (EFW)**

BACKGROUND:

- .      Energy-from-Waste facilities currently represent an alternative to both landfill disposal of solid waste and conventional sources of energy.
- .      EFW is one of the alternatives considered in Waste Management Master Plan Studies carried out by municipalities.
- .      The Ministry of Energy has lead responsibility for EFW. In March, 1987, the Ministry of Energy announced a new five year \$25 million capital assistance EFW program for the private sector and municipalities. The grant program provides 15% capital support for EFW facilities up to \$6 million per project.
- .      MOE participated in the development of National Standards for EFW facilities under the auspices of the CCME (Canadian Council of Ministers of the Environment).
- .      In December, 1988, MOE published a document entitled "Guidance for Incinerator Design and Operation, Volume I, General" part of which deals with EFW facilities.
- .      MOE is concerned about the environmental and health effects of EFW facilities and, therefore, requires that proposals undergo comprehensive evaluation prior to environmental approval.
- .      All public and private EFW facilities that handle more than 100 tonnes per day of municipal solid waste are subject to the Environmental Assessment Act.
- .      MOE has an ongoing program to review and revise existing incinerator design, operating criteria and emission standards.
- .      The public has expressed serious concerns about air emissions and, more recently, about the disposal of ash generated from EFW facilities.

CURRENT SITUATION:

- .      There are currently five solid waste EFW facilities in operation in Ontario: SWARU, Hamilton; Ford Motor





Company, Oakville; 3M Canada Inc., London; Victoria Hospital, London; and GM, Oshawa.

- . A number of EFW facilities are currently in the planning/approvals stage (e.g., Peel Resource Recovery Inc. (formerly Petrosun/SNC), Brampton; and Belkin-Trintek, Toronto). The Consolidated Board approved the SNC facility and Environmental Protection Act (EPA) approvals are now being finalized. Construction is expected to be complete by December, 1991, with full operation by June, 1992.
- . Belkin-Trintek has submitted a formal Environmental Assessment document, and a government review has been released. At present, their submission is inactive.
- . A report is expected soon on a study to describe and evaluate generic waste management alternatives, including EFW and landfill, that may be considered by municipal and private sectors.
- . As of September 1, 1990, fly ash is no longer exempt from the hazardous waste definition in Regulation 309. It must be tested for its leachate toxicity and be managed in accordance with test results. Bottom ash continues to be exempted as tests at various EFW facilities have shown bottom ash to be acceptable in terms of heavy metal contaminant levels.

#### FUTURE ACTION:

- . It is likely that the Province will be faced with more EFW proposals within the next few years. MOE will keep abreast of state-of-the-art EFW pollution control technologies and ash management strategies, participate in hearings, and provide information to municipalities and the general public on matters relating to EFW, in accordance with government policy.
- . The role of EFW's may be re-examined as part of a possible comprehensive waste strategy by the government.



ISSUE:      **Hazardous Waste Management Strategy for the 1990s**

BACKGROUND:

- .    The 1983 Blueprint for Waste Management in Ontario put forth many new policy directions, the first of which took the form of industrial amendments to Regulation 309. These amendments introduced a cradle-to-grave program for the management of liquid industrial and hazardous waste.
- .    Based upon experience gained through Regulation 309 implementation and consultations with government, industry and public interest groups, the Ministry assembled its proposed regulatory and policy strategies into a draft document entitled "Hazardous Waste Management Strategy for the 1990s".
- .    The MOE strategy paper consists of an overview summary document supported by issue-specific appendices. The document, along with a public policy paper prepared on behalf of the Canadian Institute for Environmental Law and Policy (CIELAP), served as the basis for discussion at a forum held in March 1989.
- .    Transboundary movements of hazardous wastes were examined and influencing factors were identified, such as exchange rate of the Canadian dollar, proximity of facilities to generators and differences in liability and other regulatory requirements. Despite the fact that Ontario imports more hazardous waste than it exports, the strategy proposes that Ontario's borders remain open. This proposal was supported by forum participants.
- .    The design of hazardous waste management facilities can be specified by either performance standards or technical standards. The draft strategy recommends the use of performance standards augmented, where necessary, by technical standards. This allows flexibility and innovation in design while meeting prescribed performance criteria.
- .    Operating standards for hazardous waste management facilities are addressed as site specific conditions on Certificates of Approval (C of A). To clarify and standardize these rules, the draft strategy proposes to formalize standards to address items such as inspections and closure/post-closure plans.



- . Financial assurance has been applied inconsistently in the past for hazardous waste management facilities. The strategy proposes the development of formal standards to augment existing MOE guidelines in the area of liability insurance, operating securities and closure/post-closure securities.
- . Generators of hazardous waste should take more interest in its management. The strategy puts forth various options for the implementation of a Best Management Practice plan, the purpose of which is to encourage waste management alternatives to be selected from the most desirable method(s).
- . Lastly, the strategy proposes amendments to Regulation 309 to address several issues including small quantity waste generation, product stewardship and the mixing of hazardous wastes. The most significant change proposes a paperwork control mechanism principally for small quantity waste generation, called rostering, to augment the existing manifest system.

#### CURRENT SITUATION:

- . Proceedings from the March 1989 stakeholders' forum have been finalized and have been distributed to participants and to staff throughout MOE.
- . The proceedings and the draft strategy document were key items of discussion at the Ontario Waste Management Corporation Environmental Assessment hearing.

#### FUTURE ACTION:

- . The draft strategy document will be revised based upon the forum proceedings, and then developed into a MOE position paper for broader public/industry review and comment. A recommended course of action is being prepared.
- . The first issue to be acted upon will likely be the proposed amendments to Regulation 309, and of these, the concept of roster waste is the top priority.



- . The strategy will be integrated with other Ministry waste strategies. It is anticipated that formal public/industry review of the hazardous waste strategy will follow in 1991.
- . The final step will be future legislative and/or policy changes.

WASTE MANAGEMENT BRANCH





ISSUE:      Hazardous Waste Management: Regulation 309

BACKGROUND:

- . Amendments to the Environmental Protection Act, Regulation 309, which came into effect on September 17, 1985, contain measures which increase regulatory control over hazardous waste, including:
  - registration requirements for generators of hazardous and liquid industrial wastes;
  - expansion of existing manifest requirements to cover solid hazardous waste;
  - comprehensive definitions of hazardous waste and liquid industrial waste; and
  - amendments to standards for hazardous waste carriers including driver training requirements.

CURRENT SITUATION:

- . Implementation of Regulation 309 has been ongoing for close to five years. Some 24,000 generators have submitted registration reports to date; over 19,500 of which have been registered. The backlog is presently being processed.
- . Ontario's approximately 500 funeral homes were recently asked to register as waste generators. Registration is complete with the exception of two sites.
- . Currently 30,000 manifests are received each month, representing 15,000 waste transfers. This a six-fold increase since mid-1985.
- . Violations under the Provincial Offences Act are being discovered by Ministry staff. These involve offences dealing with both generator registration and manifesting.

FUTURE ACTION:

- . Amendments to the Regulation providing additional recycling exemptions and a field services exemption have been developed and have received senior management approval.



Future amendments, intended to streamline the registration and manifest processes, are being developed as part of the Hazardous Waste Management Strategy for the 1990s.



ISSUE:        **Hazardous and Liquid Industrial Wastes -  
Transboundary Shipments**

BACKGROUND:

- .     In September 1985, amendments to Regulation 309 of the Environmental Protection Act introduced manifest requirements for the movement of hazardous and liquid industrial waste in Ontario, which strengthened the existing waste tracking system including requiring all generators of hazardous and liquid industrial wastes to register with the Ministry.
- .     Regulations under the Federal Transportation of Dangerous Goods Act (TDGA), the U.S. Resource Conservation and Recovery Act, and an international bi-lateral agreement require pre-notification for international shipments of hazardous waste. Pre-notification is not required for inter-provincial shipments except for PCBs.
- .     The importation of hazardous and liquid industrial wastes is affected by the following factors:
  - the exchange rate of the Canadian dollar;
  - transportation costs;
  - companies such as Breslube, which operate transfer stations and transportation networks in addition to treatment facilities, are attractive to generators;
  - aggressive North-American marketing on the part of Ontario hazardous and liquid industrial waste management companies;
  - the expansion of Tricil's landfill in 1986;
  - excess capacities of Ontario waste management facilities; and
  - the interest of some American generators to avoid cradle-to-grave liability for wastes that they generate as required under U.S. laws.

CURRENT SITUATION:

- .     In 1989, Ontario imported 130,000 tonnes of hazardous and liquid industrial wastes, and exported



98,000 tonnes. Transboundary hazardous and liquid industrial waste transactions account for less than 15% of all such waste transactions in Ontario.

Of the 130,000 tonnes of imported hazardous and liquid industrial waste, 80,000 tonnes came from the U.S. (62% of total imports) and 50,000 tonnes (38%) from other provinces.

Waste oil comprises the largest portion of the imported hazardous and liquid industrial waste (60% or 78,000 tonnes). It is destined for re-refiners (Breslube and Oil Canada) and waste oil reproprocessors (Quantex and Retek).

A significant quantity (2,300 tonnes in 1989) of waste halogenated solvents are imported for use as a fuel supplement at St. Lawrence Cement's kiln in Mississauga. This facility does not directly receive similar wastes generated in Ontario.

Major exporters of hazardous and liquid industrial wastes to Ontario are Quebec, Michigan, New York, Ohio and Pennsylvania.

Imported wastes go to the following types of waste handlers:

(1) Reclaimers	55%
(2) Landfill	23%
(3) Incineration	11%
(4) Transfer stations (waste)	5%
(5) Transfer stations (oil)	3%
(6) Miscellaneous	3%

Reported quantities of exported hazardous and liquid industrial waste have increased from 22,700 tonnes in 1981, to 98,000 tonnes in 1988. The majority, 87,000 tonnes, (89%) is exported to the U.S. and the remainder goes to other provinces. Waste oil, exported largely to fuel blenders and reclaimers in Michigan, comprises the largest portion. This is closely followed by waste solvents exported for thermal destruction at facilities in Michigan (Systech and Petro Chem Processing) and pathological waste exported to Decom's incinerator in Quebec.

Ontario does not currently have the facilities to handle solid and sludge forms of halogenated organic wastes.





#### FUTURE ACTION:

- . The Ministry's current position is to keep all of Ontario's borders open to allow for the movement of hazardous and liquid industrial wastes in both directions. This reduces transportation risks and promotes sharing of facilities.
- . Ontario waste management facilities continue to have more than adequate capacity for most waste types generated within Ontario. Nevertheless, the imbalance between imports and exports should be addressed.
- . Ontario requirements should be no less stringent than those in neighbouring jurisdictions.
- . If Ontario-U.S. borders were to close to Ontario generators, certain waste types, such as halogenated organic wastes in sludge or solid form, would have to be stored, much like PCB wastes, until appropriate facilities were developed in Ontario.
- . The Ontario Waste Management Corporation is proposing a rotary kiln technology that would be able to receive sludge and solid forms of halogenated organic wastes.



ISSUE:        Household Hazardous Waste (HHW) (Paint Solvents and Oil)

BACKGROUND:

Since the Ministry introduced the HHW collection program in 1986, Ontario municipalities have employed three types of program collection methods:

1.    Single day/weekend collection events.
2.    Permanent collection depots open year-round or on specific days with specified hours of operation.
3.    Phone-in, pickup service in response to telephone requests from residents.

Program Summary:

<u>Year</u>	<u>No. of Projects</u>	<u>No. of Projects Funded</u>	<u>Tonnes of Wastes</u>
1986	9	9	35
1987	20	20	<100
1988	36	36	<188
1989	63	49	<200

Nineteen permanent depots have been funded to-date, 16 for operating costs under the HHW Collection Program and three for capital costs under the Funding Assistance Program.

The Ministry recognizes the need to study all existing collection methods for cost-effectiveness and applicability to the Ontario context.

CURRENT SITUATION:

A Ministry document entitled "Guidelines for the Establishment and Maintenance of Permanent Household Hazardous Waste Collection Facilities" is in preparation. This document will evaluate HHW collection case studies including: permanent collection depot, collection day depot, selective collection, combination of permanent depot with collection day, and phone-in collection.

The feasibility of a red box collection system in Ontario will be assessed in the study. The first draft is due for Ministry review by September 1990.



FUTURE ACTION:

- . Options for a household hazardous waste program are being developed for consideration.



ISSUE:        Ontario Waste Management Corporation (OWMC)

BACKGROUND:

- .     The Ontario Waste Management Corporation (OWMC) was established in 1980 to build and operate a hazardous waste treatment and disposal facility at a proposed South Cayuga site. OWMC rejected the South Cayuga site in 1981, and in 1985 announced that its preferred site was in West Lincoln Township.
- .     In 1985, OWMC was designated under the Environmental Assessment Act.
- .     The proposal for OWMC consists of the establishment and operation of physical/chemical treatment facilities, rotary kiln incineration, a solidification plant, and a landfill.
- .     OWMC's proposal is being assessed by a 3-member Joint Board acting under the Consolidated Hearings Act. The hearing of evidence began in February 1990.
- .     OWMC's case consists of 56 witness panels. Phase 1 addresses the rationale for the undertaking and need for treatment and disposal of hazardous waste. MOE testified on environmental and waste policies, their likely effect on waste treatment needs, the rationale for a publicly owned facility and the amounts of hazardous and problematic wastes.
- .     The Ministry's position is that the OWMC facility is needed because:
  1.    regulatory initiatives will result in the generation of additional hazardous waste requiring treatment and disposal;
  2.    there is a need for treatment and disposal of waste from the discovery of mismanaged waste;
  3.    treatment and disposal facilities are not available for certain hazardous wastes;
  4.    Ontario requires security of treatment and disposal and should be in a position to manage its hazardous waste within its own borders; and
  5.    Ontario requires the security of treatment and disposal because of vagaries of the marketplace, the need for competition and the need for a treatment of last resort.





## CURRENT SITUATION:

- . Laidlaw is opposed to the OWMC proposal since it operates a hazardous waste landfill and hazardous waste incinerator in the Sarnia area. This is the only hazardous waste disposal facility in Ontario which is available to all generators. Laidlaw has also entered into pre-submission consultation for a proposal to construct a 20,000 tonnes per year rotary kiln at its Sarnia facility.
- . Reply evidence by OWMC for Phase 1 is expected to take place during the latter half of October 1990. Argument (and possible decision) will follow.
- . The major publicly funded intervenors (Region of Niagara, Township of West Lincoln, and the Ontario Toxic Waste Research Coalition) have recently announced that they will seek additional funds in November 1990.
- . Phase 2 (of six) is scheduled to begin in mid-November 1990. The OWMC witness panels will address alternative treatment processes and alternative waste management systems.
- . The Joint Board is actively working on streamlining the hearing and MOE is supportive of this. Without these streamlining measures, the hearings could last three or four years.
- . Assuming that the OWMC facility is made operational by 1996-97, total pre-start-up costs to the Province of Ontario will range between \$460 to \$500 million.
- . Pre-start-up costs comprise of:

	<u>\$ Million</u>
- Capital Costs (1988 dollars)	\$310 to \$350
- Pre-operation Costs of OWMC 1981-82 to 1989-90	98.8
- Funded Pre-operational Costs of OWMC 1990-91 to 1995-96	45.0
- Contingencies	<u>6.2</u>
	<u>\$460.0 - \$500</u>



- . Costs are not well defined because of significant cost variables such as:
  - (a) cost recovery policies to be adopted; and
  - (b) precise waste volumes and types of waste available to OWMC for treatment.

FUTURE ACTION:

- . Approach of incoming government to OWMC and current hearing will have to be defined.
- . In the meantime, the staff will proceed at the hearing in terms of current policy.



ISSUE:      PCB Destruction (Smithville)

BACKGROUND:

- .      ENSCO Environmental Services Inc.'s application for a mobile PCB destruction operation at Smithville was forwarded on August 29, 1989 to the Environmental Assessment Board.
- .      The Smithville site contains the largest quantity of PCB wastes in Ontario. Smithville's stockpile includes more than 160,000 litres of PCB liquids, 70 vaults (four by four by five feet) and 1,000 drums of PCB contaminated materials (including 200 drums of contaminated soil), 82 drained transformers and several hundred small items such as capacitors, magnets and other metallic objects.
- .      The PCB liquids are stored in a secure containment building and the drums, vaults and transformers are in a secure warehouse on site.
- .      Emergency response procedures for the site have been established in consultation with the Smithville fire department and Niagara Regional Police.
- .      The Ministry awarded ENSCO a \$12.7 million contract to destroy PCB wastes and contaminated soil at the Smithville site. The company proposed to use a mobile rotary kiln.
- .      The Environmental Assessment Board approved the ENSCO application on May 11, 1990 and certificates of approval were issued in June 1990.

CURRENT SITUATION:

- .      The approval of applications for an emergency diesel generator and the solvent decontamination area are pending.
- .      ENSCO plans to start site preparation in September 1990.
- .      Certain contractual issues are still being worked out with ENSCO. The Ministry's consultant, Proctor & Redfern, is waiting for a response concerning these issues.



FUTURE ACTION:

- . ENSCO will probably mobilize the incinerator in October or November 1990 and begin burning wastes in January, 1991.
- . The project is expected to be completed by July, 1991.
- . Due to the extra costs associated with delays, and the conditions imposed by the Environmental Assessment Board, the costs of the incineration program may exceed \$15 million.





ISSUE:      **PCB Management**

BACKGROUND:

- . PCBs have a low flammability, and are strongly resistant to thermal, chemical and bacterial degradation. Their acute toxicity is low and virtually nothing is known with certainty as to their chronic toxicity.
- . PCB waste occurs in three contexts:
  - Askarels;
  - Contaminated mineral oil; and
  - Solid wastes
- . In Ontario there are approximately 6.5 million litres of askarels. Over 80% is estimated to be still in service. An unknown volume of contaminated mineral oil is still in service and about three million litres are in storage as waste.
- . There are approximately 1,300 owner-operated PCB storage sites in Ontario. A centralized, computerized PCB waste inventory is available within the Waste Management Branch.
- . In 1986, the Mobile PCB Destruction Regulation was promulgated, establishing a regulatory framework for the destruction of PCBs at or near to the waste generation or storage sites.
- . Federal regulations (under the Environmental Contaminants Act) restrict the use of PCBs, the sale of askarel-type equipment and emission of PCBs from working equipment. Federal guidelines on PCB usage also exist.
- . Ontario's Environmental Protection Act, and the regulations thereunder (O. Reg. 11/82, O. Reg. 309, Reg. 148/86) cover the management of PCB wastes in the province.

CURRENT SITUATION:

Federal Regulations

- . After the St. Basile-le-Grand fire, Environment Canada gazetted an Order in Council (O.I.C.) with its own set of storage requirements applying to all PCB storage sites in Canada.



- . An amended O.I.C. specifically excluding Ontario was gazetted on May 13, 1989. The O.I.C. (and the regulation now in preparation to replace it) is now restricted to federal inspection of federally-owned or regulated sites. The question of possible federal audit of provincially-regulated sites has not been resolved.
- . A federal regulation prohibiting PCB export was put into effect in July 1990. Ontario has never encouraged PCB exports. Since 1989, by way of policy, no PCB's have been allowed to leave Ontario.

#### Destruction Status (Ontario)

- . Smithville has the largest stockpile of PCBs in Ontario, including more than 160,000 litres of PCB liquids, 70 vaults and 1,000 drums of PCB contaminated materials, and 82 drained transformers. These wastes have been secured.
- . A Class 1 technology (incineration) has been approved by the Environmental Assessment Board to destroy the waste stored in Smithville. (Further details in the briefing note "PCB Destruction: Smithville").
- . Other potential Class 1 technologies include:
  - Odgen's circulating fluidized bed combustor;
  - Vesta's rotary kiln;
  - Shirco's infrared combustor (O.H. Materials - Goose Bay); and
  - Westinghouse's plasma torch.
- . Under the mobile destruction regulation, five companies now have approvals under Class 2 technology. These Class 2 systems are mostly sodium-based chemical destruction units approved to treat mineral oil contaminated at less than 10,000 ppm PCB. Oil at higher concentrations may be treated by dilution under the Director's Instructions.



- . Up until the end of 1989, over 6 million litres of contaminated mineral oil had been treated by these technologies in Ontario.

#### Federal/Provincial Destruction Programs

- . After the St. Basile-le-Grand fire, Environment Canada announced that it was developing a national PCB incineration program involving lease of transportable/mobile incineration units.
- . In September, 1988, the federal Minister of Environment announced that his Ministry would be involved in leasing incineration capability. The units would locate on federal sites and would clean up federal PCBs first. The possibility of handling other PCB wastes was also envisaged.
- . The federal government which contracted the work to O.H. Materials, recently completed the PCB cleanup at Goose Bay, Labrador. No report on the incinerator's performance is available as yet.
- . Environment Canada is now working with the Atlantic Provinces to install a mobile technology in one of the Atlantic Provinces.
- . A PCB test burn in Swan Hills, Alberta, using the VESTA (rotary kiln) technology was completed in May, 1990. The analyses of samples and a final report should be available within two months.

#### PCB Phase Out

- . Environment Canada announced in the summer of 1988 a five-year phase-out program for PCB waste, including high-level PCB liquids.
- . A Federal/Provincial task force report concluded that phase-out of askarels by 1993 is not practical. The options under consideration are:
  - phase-out in ten years; or
  - phase-out when destruction facilities are available.
- . The task force originally favoured phase-out when destruction facilities are available, but at its



last meeting (March 2, 1989), the members, WITH THE EXCEPTION OF ONTARIO, were supportive of the 10-year phase-out option.

- . Ontario supports a phase-out program once destruction capability exists.
- . The phase-out of askarel material at "sensitive" sites was agreed to by the Federal and Provincial governments. This phase-out is targeted for 1993.

#### FUTURE ACTION:

- . Regulatory amendments will be proposed to senior management for destruction of PCBs by encouraging a limited degree of consolidation, resulting in diminished unit destruction costs.
- . Provincial guidelines on decontamination of PCB equipment are being developed.
- . The Ministry will continue to participate in the development of a national PCB inventory and phase-out strategy.
- . The Ministry will continue to work with Environment Canada, Quebec Hydro, Ontario Hydro, and Environment Quebec to develop a PCB destruction capability.
- . The Ministry will assist the Ministries of Education and Health in removing the PCB wastes in storage at schools hospitals, and other sensitive sites.





ISSUE:      **U.S. Hazardous Waste Dumpsites**

BACKGROUND:

- . More than a dozen waste dumpsites in New York are known to leak hazardous chemicals to the Niagara River.
- . U.S. Federal and/or State environmental agencies have entered into litigation to remediate each site.
- . The Ministry has participated in activities involving all of these sites. In some instances, the Ministry has intervened in litigation.
- . In June 1988, Commissioner Thomas Jorling and Deputy Commissioner Edward Sullivan (New York State Department of Environmental Conservation) adopted a get-tough stance with the Occidental Chemical Corporation, which owns most of these sites and generated most of the waste involved.
- . During 1989, activities at Hyde Park, S-area, Love Canal and Durez accelerated. A number of action decisions were made. However, on several points, Occidental and the government agencies have failed to reach agreement.

CURRENT SITUATION:

- . In December 1989, U.S. EPA and New York DEC issued a report outlining a schedule to reduce the flow of toxic chemicals to the Niagara River from 22 Category I and II sites.
- . New York State has established a Hazardous Waste Siting Plan to make the State self-sufficient in handling its industrial wastes over the next 20 years.
- . CWM, Model City is the remaining active hazardous waste site in the region. The Ministry has argued strenuously for strict construction controls on site and for assurances that funds set aside for perpetual care are adequate.

FUTURE ACTION:

- . Actions taken by U.S. EPA and New York State suggest that serious consideration is being given to ensuring that hazardous waste sites are made secure.



- . The Ministry will continue to monitor U.S. actions closely to ensure that action is taken to clean-up sites which are contaminating the Niagara River.

INTERGOVERNMENTAL RELATIONS  
AND STRATEGIC PROJECTS



ISSUE:      **Proposal to Dispose of Southern Ontario Wastes in  
Northern Ontario (Abandoned Mine Site)**

CURRENT SITUATION:

- .      In recent months, a great deal of attention has been focused on several Northern Ontario communities as possible candidate areas for accepting municipal wastes from Metropolitan Toronto.
- .      The Town of Kirkland Lake has passed a resolution agreeing to act as the host community by utilizing abandoned pits on the Adams Mine property for the disposal of waste material for the Greater Toronto Area. The site is one of five contingency sites endorsed by the Solid Waste Interim Steering Committee (SWISC).
- .      Endorsement by SWISC requires three criteria to be met:
  - (a)    must have a willing host municipality;
  - (b)    must have sufficient capacity; and
  - (c)    must meet the Environmental Assessment Act (EAA) requirements.

FUTURE ACTION:

- .      Metro has signed an option agreement to allow field testing to be done on the Adams Mine site. This proposal would require enormous capital expenditures and detailed engineering in order to proceed as proposed.

**NORTHEASTERN REGION**



ISSUE:      **Waste Management Master Planning (WMMP)**

BACKGROUND:

- .      Waste Management Master Planning is a program to assist groups of municipalities in the development of comprehensive long-term waste management plans which incorporate system components to minimize the use of landfill through a review of reasonable options.
- .      A Waste Management Master Plan is a single vehicle for planning and for government review and provides a forum for all waste management issues.
- .      The Waste Management Master Plan Program addresses municipal concerns regarding the costs and time frame public concerns about waste management issues through active involvement by the public in the planning process.
- .      The Ministry provides a maximum of 50% funding assistance to regions, counties or groups of municipalities wishing to develop a Waste Management Master Plan.

CURRENT SITUATION:

- .      Forty-four studies are currently underway. Two that have been completed are North Easthope Group and Waterloo Region.
- .      A budget of \$1,700,000 has been allocated for Fiscal Year 1990-91.
- .      Throughout the province, master plan completion is being delayed due to a number of problems such as the NIMBY syndrome, a lack of public awareness and education, inexperience with the Environmental Assessment process, and the emergence of private development with its effects on the planning process.





#### FUTURE ACTION:

- . To address some of the problems faced, the Ministry is in the process of re-structuring the process and developing appropriate policies, guidelines and education material, in order to provide increased technical support to the committees and the public involved.

WASTE MANAGEMENT BRANCH



ISSUE:      Coal Tar Waste

BACKGROUND:

- . Coal tar contains carcinogenic substances such as Benzo(a) Pyrene.
- . A consultant undertook an inventory of municipal coal gasification plant sites for the Ministry and found a total of 41 sites in 36 municipalities. The inventory report was released in June 1987. A similar inventory of industrial plant sites was released in July 1988. It identified an additional 44 plant sites in 25 municipalities.
- . MOE has funded 50% of the clean-up costs at Ottawa (\$5.5 million), Chippawa Creek (\$750,000), Waterloo (\$800,000), and 26 Berkley Avenue, Toronto ((\$1,000,000)).
- . Initial studies have been completed by the Ministry at Sarnia, Ingersoll, Kingston, Napanee, Cornwall, and Brockville. Coal tar and/or contaminated soil was found at all sites.
- . Remedial actions have been completed at Waterloo, Toronto, the Rideau River in Ottawa, Chippawa Creek, Thunder Bay Harbour, and the Trent River in Trenton.

CURRENT SITUATION:

- . Clean-up actions are ongoing in Ottawa (170 Lees Avenue) and Port Stanley.
- . Detailed studies are ongoing by owners at London, Kingston, Sault Ste. Marie, Cambridge, St. Thomas, Owen Sound and Stratford.
- . The Ministry is requiring owners of sites containing coal tar wastes to register the waste on their property titles. However, there is no legislation to enforce this requirement.

FUTURE ACTION:

- . Consultants will be hired to carry out investigations at the remaining sites over the next three years.



- . The Ministry could spend up to \$1.7 million from the Environmental Security Account to assist site owners in these investigations.
- . At the present time, the Ministry is committed to fund half of an estimated \$600,000 to conduct detailed investigations at St. Thomas, Guelph, Brantford, Owen Sound, Peterborough, London, Lindsay, Stratford, Kingston, Sarnia and Brockville. MOE will fund 100% of study costs at Napanee, South River and Simcoe.
- . MOE will require owners to take individual remedial actions as necessary.



ISSUE:      Dust Suppression

BACKGROUND:

- . Since September 1985, subject wastes that are applied as dust suppressants must meet generator registration and manifest requirements of Regulation 309 and must be applied by a carrier certified under Part V of the Environmental Protection Act (EPA). The dust suppression site is defined in Regulation 309 as a waste disposal site but is exempted from the certification requirements of Part V.
- . Calcium chloride is classified as a product, therefore, it is subject only to the general provisions of Part II of the EPA.
- . The Ministry announced a ban of the use of waste oil as a dust suppressant in August 1988, to be effective January 1989 in the form of an amendment to Regulation 309.
- . Further study is required prior to deciding whether to extend the used oil ban to include product or "virgin" oils.
- . Temfibre proceeded to challenge the Ministry's position that lignosulphonate was a waste, all the way to the Ontario Supreme Court. A judgement made on March 31, 1989 declared that Temfibre's lignosulphonate was not a waste and thus exempt from Part V of the EPA and Regulation 309, subject to a number of terms and conditions.
- . In November 1988, Ministry staff drafted a position paper and a proposed regulation intended to regulate all dust suppressant materials whether they were considered a waste or a product. This package was circulated for review by MOE and Ministry of Transportation staff.

CURRENT SITUATION:

- . Review comments on the draft regulation are being collected and incorporated into the next draft. The intention is to have a new regulation in place by mid-1991.
- . In September 1989, Ministry officials met with Domtar to discuss the issue of waste versus product. In order for





Domtar's materials to be designated a product, a number of alternations and improvements would have to be made.

- . Waste lignosulphonate from Domtar continues to be used as a dust suppressant and is regulated as a waste under Regulation 309 and Part V of the EPA.
- . On-site generated waste oil may be used as a dust suppressant on coal storage piles. Certificates of Approval have been issued to Dofasco, Stelco, Algoma and Ontario Hydro. In June 1989, the Ministry ruled that "on-site" refers to waste oil generated on any property operated by the C of A holder, not just where the storage pile is located.
- . The following dust suppressant product materials are being used this season: Temfibre's lignosulphonate, salt brine, oil field brine, virgin oils, re-refined oils, calcium chloride, Dust Bond (a petroleum-based resin/surfactant mixture), DCS Dust Control Agent (oil/asphalt/water), and Lignosol AP (calcium lignosulphonate pulping liquor distributed by Daishowa).
- . Approximately ten dust suppressant materials are currently under evaluation by Ministry staff. Of these, Dustmaster, Calcium Magnesium Chloride and Perma-zyne have been designated as products. A generic Letter of Agreement has been finalized. Product dust suppressant producers/distributors will be required to enter into an agreement with the Ministry to ensure that the application of their material to Ontario roads is environmentally acceptable.
- . The Quebec Ministry of the Environment released a report in which calcium chloride and calcium lignosulphonate were considered acceptable dust suppressants for use on Quebec roads.

#### FUTURE ACTION:

- . Ministry staff will continue to assess new applications/proposals from dust suppressant suppliers and enter into agreements where appropriate.
- . Terms of Reference for a consultant's study of all dust suppressant materials are to be released this September. The study is to take place prior to the finalization of any new policies/regulations.



Options will be prepared including continuing the regulation development process to have a regulation in place by late-1991 to control the use of all dust suppressant materials.



ISSUE:      **Mining Wastes**

BACKGROUND:

- . Mining and ore processing is an environmental issue of particular concern in the Northeast Region as the Region contains the largest concentration of mines in the Province. Mining/ore processing leads to the generation of substantial quantities of waste. By weight usually greater than 95% of the processed ore ends up as waste.
- . During active operation industry effluents are subject to quality standards, which mining operations, in general, successfully meet.
- . At closure, depending on the nature of the waste deposited in the tailings area and the design of the areas, some mines can leave a large potential environmental problem. Chemical activity in the tailings area leads to the release of contaminants. The oxidation of mineral sulphides causes acid production and metal releases. Sufficient potential acidity can be generated to cause a problem for many decades.
- . Slumpage or failure of the berms can lead to the uncontrolled release of tailings.

CURRENT SITUATION:

- . Mining operations exist on leased property, or on land that reverts to the Crown. In the past this has created inherited problems for the government, which need to be avoided on existing and future operations. For example, Kam Kotia, a Timmins area mining site, will require more than \$10 million to close-out effectively. Complicating these situations is that there are not always readily available solutions for close-out that are applicable to all circumstances.
- . Uranium mining is a subset of the general issue that contains a unique problem in addition to those stated above. Jurisdictionally, the Atomic Energy Control Board is responsible for the formal decommissioning of uranium mining facilities except if the decommissioning occurred before a certain date. Whether or not decommissioning is controlled by AECB, the facilities ultimately revert to the Provincial Crown. The Crown is at risk since the long term stability of these surface deposited wastes cannot be guaranteed. Currently,



negotiations are underway between the province and the federal government toward a draft resolution of the waste uranium issues.

- . Revisions to the Mining Act, scheduled for the end of 1990, will have provisions to handle future problems. Solutions to the legacy of past problems, however, still need to be found. Research funding is being provided by the Ministry of the Environment.
- . The Interministerial Committee on Abandoned Mine Hazards administers a small fund that is used to deal with abandoned mine hazards, including tailings areas. That fund does not have the sufficient resources to deal effectively with the hazards associated with tailings areas such as exist at the Kam Kotia and other sites.
- . A relative down-turn in the economic outlook for certain minerals has lead to a number of significant closures in the Region. Two major Iron Ore mines as well as several producing gold mines have closed. Rio Algom, a major producer of uranium in Elliot Lake has announced a closure effective September 1 of this year.

#### NORTHEASTERN REGION





ISSUE:      **Used Oil**

BACKGROUND:

- .      Used oil has been regulated as a liquid industrial waste in Ontario since the 1970's and, since 1985, as either a hazardous or liquid industrial waste.
- .      In March 1988, the Ministry banned the use of waste oil as a dust suppressant effective December 31, 1988. Regulation 309 was amended on January 7, 1989.
- .      Allegations during the Spring of 1989, regarding the mixing of hazardous wastes with commercial fuels, brought the regulatory definition of Waste-Derived Fuel (WDF) and its associated approval exemptions into question. A study of WDF was initiated to assess its current use and the implications of removing the exemptions and/or definition from Regulation 309.
- .      While the study was underway, MOE no longer provided the exemption from Part V of the EPA for WDF applications.
- .      The Consultant for the WDF study was selected in November 1989. A progress report was received April 23 1990. WMB staff identified grave concerns with the report. The consultant's services were terminated May 18, 1990.
- .      In December 1989, the Oil Canada re-refinery ceased collecting and re-refining waste oil. Facts obtained by MOE in April 1990 did not substantiate that a waste oil crisis would occur if Oil Canada ceased its Cherry Street re-refinery operation.

CURRENT SITUATION:

- .      A framework for WDF policy has been developed. The WDF strategy is targeted to be presented to Management Committee by mid-September 1990.
- .      The Canadian Petroleum Products Institute released their Used Oil Action Plan on March 20, 1990. Ministry staff have completed their review of this report and held preliminary discussions with the CCPI on June 25, 1990.

FUTURE ACTION:

- .      The WDF strategy may require changes to Regulation 309.



- . If the Used Oil Action Plan's recommendations are adopted, further legislative/regulatory amendments and/or new policies and guidelines will be required with respect to the management of used oil.
- . Options are being developed for consideration.



ISSUE:      Student Action For Recycling Program

BACKGROUND:

- . Announcement of the full-scale Student Action for Recycling program was made in October, 1989, at the Recycling Council of Ontario Convention, after an initial pilot phase of six months funded equally by the Ministry and Ontario Multi-Material Recycling Incorporated.

CURRENT SITUATION:

- . Schools are contributors to waste; the program encourages the implementation of recycling into schools.
- . The other role of the program is to develop students' awareness of the environment and to instill good habits to recycle.
- . The scope is to provide financial and technical support for recycling efforts in primary and secondary schools of Ontario.
- . The program is an integral part of the government's environmental strategy to divert waste from landfills and incineration.
- . Eligible applicants will obtain funding for two-thirds of eligible capital costs incurred; i.e., equipment, building modification or construction for materials storage, safety and monitoring equipment and vehicles.
- . Fifty percent of a board recycling coordinator's salary, to a maximum of \$20,000 (only for the first year) is funded under this program.
- . The delivery of the program is through Public and Separate School boards, Independent Schools and Provincial Schools (i.e., Deaf and Blind, Special Studies).
- . Private trade schools are not eligible.
- . Municipalities can also apply for financial assistance for a vehicle at 100 per cent funding necessary to service schools exclusively.



- . The objective is to implement recycling in all of these approximately 5,000 schools within five years.
- . Chairpersons and Directors of School Boards and Independent Schools, received announcements of the STAR program at the end of March, 1990; the mailout included applications and program guides for school boards and teachers.
- . The full-scale program is being administered by the Waste Management Branch in conjunction with regional offices.
- . To date, 12 school boards with a total of 628 schools have been approved for grants totaling \$678,038.
- . Eleven school boards are presently under review; when approved, 460 additional schools will be recycling this school year.
- . Total estimated recyclable material; i.e., cans, glass bottles, old newspaper and fine paper from these schools is 2,800 tonnes for this school year.
- . A number of other school boards in the Greater Toronto Area are preparing to submit applications for this school year.





ISSUE:      **Waste Management in Central Region**

CURRENT SITUATION:

. Most municipalities are experiencing some sort of waste crisis. Almost every municipality in Central Region will be faced with the need for new, or additional landfill capacity, and with the high cost associated with the approvals process. Numerous municipalities have committed themselves to Master Plan studies, either alone, or as part of a Regional study. Perhaps the most urgent of these searches is currently under way in and around the Municipality of Metropolitan Toronto, as it is anticipated that Metropolitan Toronto will be without disposal capacity by 1993.

. Waste Management Master Plan Studies are being undertaken in:

1. Solid Waste Environmental Assessment Plan (SWEAP),  
Regional Municipalities of Durham, York and  
Metropolitan Toronto
2. Region of Halton
3. Region of Peel
4. County of Northumberland
5. County of Peterborough
6. County of Victoria
7. District Municipality of Muskoka
8. County of Haliburton
9. Townships in Simcoe County

. In addition to the search for new disposal facilities, most municipalities are involved in multi-material recycling programs with the assistance of this Ministry and OMMRI, through funding provided under the Municipal Recycling Support Program.

. Industry is following the municipalities example by utilizing the Ministry's Industrial Recycling Program to develop alternatives to disposal.

. Additional programs such as the Household Hazardous Waste Program; the Ontario and Canadian Waste exchange; the Student Action for Recycling (STAR) program; and pilot studies into apartment building recycling, wet/dry separation and composting are under way.

**CENTRAL REGION**



ISSUE:      Waste Management Issues in Southeastern Region

CURRENT SITUATION:

- .      There are about 300 municipal waste disposal sites in the region. Four of these are major sites which serve as regional disposal sites.
- .      About 130 of these sites have five years capacity or less. The municipalities in the Kingston area and Brockville face a critical shortage. The site serving Kingston was recently issued an emergency Certificate of Approval and Brockville is requesting one. Many of the smaller municipalities are also facing the capacity problem and being forced to transport their wastes to a private site near Ottawa at a high cost.
- .      There are nine master plans underway in the region covering the major population areas. These plans are currently bogged down.
- .      Recycling has been growing very quickly over the past year. It had been slow in this part of the province due to the lack of central depots, where the items are bulked for shipment.
- .      The region has 160 PCB sites. Of this number 45 are major sites and three are sensitive sites. All of these sites have been inspected in 1990 and found to be in compliance. About 60% of the minor sites have been inspected in the last two years. It is anticipated that all of the sites will have been inspected by the end of 1990.

FUTURE ACTION:

- .      The Quinte Recycling Depot is to be opened this month serving Trenton/Belleville and the surrounding area. Other recycling depots are expected to be established in Cornwall, Renfrew and Lanark Counties next year.
- .      Aid the municipalities to find solutions to waste management problems.

SOUTHEASTERN REGION



ISSUE:      Waste Management Issues in Southwestern Region

CURRENT SITUATION:

- .      The waste management problem in Toronto, and generally across the province, has resulted in a strong interest in site owners in the Southwestern Region to expand their area of service and their landfill sites. Citizens in the vicinity of the facilities are strongly opposed and have continually objected to any move towards the expansion of any landfill site.
- .      Lambton County will take over ownership of all municipal landfill sites on January 1. The Town of Petrolia has attempted to sell its landfill site to the highest bidder, which was Toronto.
- .      In the Essex - Windsor area, the development of a waste management master plan has been underway for many years. Target sites to handle solid waste in subsequent years are opposed by the public. The existing site is to be filled by the mid 1990's. The decision on the future disposal of solid waste in the Windsor area has been delayed.



# WATER MANAGEMENT





ISSUE:       Groundwater Management and Protection Program  
Re: Great Lakes Water Quality Agreement of 1978,  
as amended by Protocol of November 18, 1987,  
(Annex 16)

BACKGROUND:

- . In 1987, the Great Lakes Water Quality Agreement between Canada and the United States of America, in cooperation with State and Provincial Governments, was amended to include programs for the assessment and control of contaminated groundwater and subsurface sources entering the boundary waters of the Great Lakes System pursuant to Annex 16.
- . Coordination of existing programs in Canada to meet the objectives of Annex 16 was formalized through an agreement between Canada and Ontario and called for the appointment of groundwater experts to the Canada-Ontario Coordinating Committee.

CURRENT SITUATION:

- . Federal and Provincial groundwater experts have been appointed to the COA Coordinating Committee; that committee has formally approved the establishment of a Groundwater Sub-committee, and terms of reference for the sub-committee have been defined.
- . An initial status report on the implementation of Annex 16 was prepared for presentation to the International Joint Commission; it identified possible sources of groundwater contamination in the Great Lakes Basin, and outlined a plan of action to ensure that Annex 16 is implemented under current programs.
- . The Ministry has recognized the need for a groundwater management and protection program to properly conserve and protect this important provincial resource. The program is currently under development.
- . The program's goals include:
  - fair sharing and conservation of available groundwater;
  - protection of groundwater quality through prevention of future contamination and abatement of existing sources of impairment;



- provision of adequate information and predictive tools to decision-makers and the public to ensure groundwater issues are adequately addressed in land and water use planning.
- . The program will achieve these goals through three major areas of activity:
  - protecting against resources degradation;
  - understanding and controlling resources utilization; and
  - resource inventories.

#### FUTURE ACTION:

- . The COA Groundwater Sub-Committee will undertake preliminary estimates of contaminant loadings to groundwater from selected sources of contamination in order to evaluate the significance of groundwater contamination in the Great Lakes basin. Five-year work plans including budgets will be formulated and implemented as required.
- . A draft Groundwater Protection and Management Strategy will be taken forward for approval through the Ministry.

#### WATER RESOURCES BRANCH



ISSUE:      Drinking Water Surveillance Program (DWSP)

BACKGROUND:

- .      The DWSP was developed to provide centrally controlled, readily accessible information regarding current drinking water quality in Ontario and to provide the basis for rapid remedial action in problem areas.
- .      Sixty municipal water supplies, covering nearly 80% of the 7,200,000 people in Ontario receiving water from piped municipal systems, were included in 1988-89, the third year of the program.
- .      Analyses for approximately 180 chemical compounds address current Ontario Drinking Water Objectives (ODWOs), identifies organic substances of concern and determines process parameters. Substances to be monitored are selected from MOE's Interim Priority List of Hazardous Contaminants in Drinking Water and relevant International Joint Commission, World Health Organization, U.S. Environmental Protection Agency and ODWO documents.
- .      Results from the program are used to identify contaminants, monitor trends and indicate the treatment efficiency of plant procedures.
- .      Results from the program were used in the preparation of a "Comprehensive Survey of the Status of Great Lakes Drinking Water", a report published by the Canadian Public Health Association, supported by Health and Welfare Canada and the Ontario Ministry of the Environment.
- .      Data have also been supplied to epidemiologists from other government agencies and Universities carrying out research into the effects of drinking water on human health. Data are also supplied to consultants, the public and municipalities.

CURRENT SITUATION:

- .      DWSP monitors 76 water treatment facilities (1990) including all major population centres.
- .      An overview report, summarizing, comparing and discussing results obtained from the Program during 1987 has been prepared and published; the 1988 overview is awaiting printing.



- . Annual reports were completed on 44 locations on DWSP in 1987 and on 50 DWSP locations in 1988.
- . As part of the Drinking Water Protection Program, it is intended to eventually expand DWSP to include all 486 municipal systems.

#### FUTURE ACTION:

- . Incorporate an expanded DWSP into the Drinking Water Protection Program. Ministry staff are currently designing the DWSP to permit reasonable expansion with fiscal constraint. Current estimated first year costs for inclusion of a municipal water system on DWSP is \$30,000/municipality. Changes in frequency of testing are being considered. Ongoing program costs with current program design are marginally reduced from first year costs.
- . This program awaits review with the Minister to determine how and when to carry out NDP campaign commitment to a Safe Drinking Water Act.
- . Options are being developed for consideration.

#### WATER RESOURCES BRANCH





ISSUE:      Beaches Protection

BACKGROUND:

- . Ontario's bathing beaches are an important recreational attraction for Ontario residents and tourists.
- . Bacterial contamination in beach waters is the main reason for beach closures. The most probable recurring sources of contamination are urban stormwater runoff, agricultural wastes, combined sewer overflows, sewage treatment plant discharges, industrial discharges and animals/birds.

CURRENT SITUATION:

(1) Urban

- . In Ontario, about 450 municipalities have storm sewers discharging directly to natural receivers. Currently, two voluntary mechanisms are used to provide stormwater control: the Urban Drainage Management Program, and Pollution Control Planning Studies (and implementation of the study findings).
- . Since 1984, including funding for 1988-89, MOE has provided \$20.2 million to Metro Toronto and its local municipalities under the MOE-Metro Toronto Waterfront Water Quality Improvement Program. The funding level is approximately 50% of project costs. The funded projects include pollution control planning studies, interim remedial works (e.g., diversion of some sewers outfalls), and accelerated separation of combined sewers.
- . Since 1985, including funding for 1988-89, MOE has provided \$3.0 million to municipalities outside Metro-Toronto under the Pollution Control Planning Study Program. The funding level is approximately 50% of study costs.

(2) Rural

- . Since 1985, MOE has provided \$3.2 million for the Rural Beaches Pollution Control studies. These studies are initiated primarily through conservation authorities.



Detailed plans for implementing corrective measures have been received from seven study areas. Findings to date suggest that continued financial assistance programs coupled with educational programs and local proactive targetting of remediation will be necessary to sustain reasonable progress in restoring beach and stream water quality.

#### Provincial Beaches Strategy

Several principles were established for the Beaches Management Strategy:

- (1) It is the responsibility of the municipalities to conduct pollution control planning and implementation; MOE will initiate and partially fund studies and provide technical assistance and direction.
- (2) Studies and implementation will be funded on a priority basis.
- (3) Short-term and innovative solutions may be pursued to open beaches while longer term plans are developed.
- (4) Long-term strategies must have intermediate progress milestones.

Numerous projects were initiated as part of the Beaches Strategy. In some cases, related projects were also underway as a result of ongoing work.

Goals of the Rural program are:

- to obtain a definition of sources spatially and temporally;
- to promote local awareness of problems;
- to promote awareness of available assistance programs;
- to produce detailed plans for implementing corrective measures; and
- in selected areas, to document water quality changes associated with an intensive program of implementation of environmentally appropriate livestock management practices.



(1) Urban Projects

- continuation of the Toronto Area Watershed Management Strategy studies and implementation planning;
- development of feasibility studies and pollution control plans in St. Catharines, Peterborough, North Bay, Kingston, Fort Erie, Belleville, Hamilton and Sarnia;
- debris clean-up programs such as SCOUR (Students Cleaning Our Urban Rivers);
- beach pilot study of ultraviolet disinfection in an Upper Thames River reservoir; and
- demonstration project for Real Time Control of Combined Sewer Overflows.

MOE has a 1990-91 budget of \$2.8 million for beach studies, of which \$1.5 million is for Metropolitan Toronto.

FUTURE ACTION:

- . A policy is being developed for funding urban stormwater related pollution remedial works. The policy will suggest funding for certain capital works that have been ineligible for MOE direct grant funding.
- . A policy is presently being developed to control the quality of stormwater runoff from new development. This policy focuses on control of stormwater quality discharges impacting on beach areas and cold and warm water fisheries.
- . A policy is required to provide government support and direction for the implementation plans being developed as part of the Rural Beaches component. This policy should address the integration of financial assistance, education programs and local proactive targetting of remediation to bring about needed corrective actions.

WATER RESOURCES BRANCH



ISSUE:        Rehabilitation and Protection of Urban Rivers in  
                 the Greater Toronto Area

BACKGROUND:

- .     Water Quality in urban rivers in the Toronto Area is an issue of concern. These rivers are heavily contaminated due to urban storm water runoff, combined sewer overflows, agricultural runoff, erosion, sewage treatment plant discharges and spills.
- .     Urban river water quality is one of the key issues to be considered in developing a GTA strategy - see related briefing note entitled Greater Toronto Area Land Issues.
- .     In 1981, the Toronto Area Watershed Study (TAWMS) was initiated in order to provide a clearer definition of water quality problems and to formulate cost effective solutions. Emphasis has been placed on the Don and Humber Rivers, and Mimico Creek.
- .     The Toronto waterfront is one of 17 Areas of Concern in the Great Lakes (Ontario portion) for which a Remedial Action Plan is being developed to resolve identified water quality problems. The water quality abatement and protection measures being proposed for Greater Toronto Area rivers will also provide the river clean-up component of the Toronto RAP.
- .     Proposed RAP remedial actions include the following:
  - implement specific plans to correct localized water use impairment;
  - reduce the impacts of treated and untreated sanitary sewage;
  - reduce the impacts of dry weather sources;
  - reduce the impacts of stormwater runoff.
- .     The 1989 Crombie Royal Commission on the Future of the Toronto Waterfront Interim Report concluded that new developments and re-developments should be required to use up-to-date abatement technology.
- .     The July 1990 Kanter Commission Greenlands report notes that a Greater Toronto Area Greenlands strategy should include the valleys and streams within the region. The Oak Ridges Moraine region is particularly valued for its recharge and headwater role in the region's surface waters.





## CURRENT SITUATION:

### Overview

- . Direct abatement measures are under way to eliminate contamination from priority outfalls. These measures are being undertaken in cooperation with Metro Toronto and area municipalities.
- . Pollution control planning studies, interim remedial works and accelerated separation of combined sewers have been undertaken since 1984 under the Metro Toronto Water Quality Improvement Program (WQIP). To date, the Ministry has contributed \$72.48 million under this program. Since 1984, an additional \$28.39 million has been provided to the municipalities for trunk sewer and sewage treatment plant improvements. In 1989, the Ministry spent \$2,811,500, and the projected 1990 expenditure will be \$625,000 for this program.

### Humber River

- . Abatement actions being implemented include:
  - cross connection/disconnection of sanitary sewers;
  - combined sewer overflow controls;
  - local detention tanks for basement flooding protection;
  - Metro is taking the initiative for development of demonstration projects, e.g., Emery Creek Pond.

### Don River

- . Studies showed the Don River received storm water runoff from more than 872 outfalls. There are 30 combined sewer overflows located in the cities of Toronto, Scarborough and the Borough of East York.
- . In 1985, 159 storm sewers had excessive bacterial loadings (fecal coliforms), and 14 represented a significant percentage of the basin's loadings for one or more of the 13 chemical parameters sampled for.



The "Strategy for Improvement of Don River Water Quality" was released to the public and the Toronto RAP in September, 1989. The study involved definition of water quality problems, development of rehabilitation objectives, and evaluations of the effectiveness of various control options. Options were subsequently divided into three phases of implementation: immediate (1989-90), Phase I (5-10 year time frame), and Phase II (10-50 year time frame).

Some of the remedial measures proposed include:

- prevention of stormwater contamination at the source;
- end-of-pipe controls;
- installation of combined sewer overflow controls;
- incorporation of stormwater quality ponds in new and existing areas;
- reduction in runoff through promotion of infiltration techniques; and
- urban bacterial controls.

Ultimately, water quality goals and management actions will be selected on the basis of public feedback and stakeholder endorsement. Public input will play a key role in determining the time span over which water quality improvements are to be realized, the final cost of the strategy and the implementation schedule adopted.

Estimated clean-up measures could cost between \$30 million and \$60 million per year over a 10 to 20 year period. The total cost may exceed \$1 billion.

### Rouge River

MOE has been working closely with MTRCA (the lead agency), provincial agencies, municipalities in the Rouge watershed and interest groups towards a management plan which balances concerns for ecological health and quality with economic growth and development.



- . A draft of this management strategy entitled, "A Comprehensive Basin Management Strategy for the Rouge River Watershed" has been reviewed by MOE staff and is expected to be released for public and agency endorsement shortly.
- . The strategy contains immediate, medium and long term actions for improvements to protect and enhance the watercourse and valley lands. The strategy includes policies, technical standards, operational criteria and proposed actions.
- . A number of immediate actions recommended in the strategy are presently underway to address water quality protection. These include:
  - Valley Land Cleanup by the Environmental Youth Corps;
  - Log cribbing and other natural design structures for erosion prone areas;
  - Tree plantings for channel stabilization;
  - Development of a spills detection system;
  - Restoration of stream bank vegetation and natural channels in the upper reaches and headwaters; and
  - Continuation of the activities through Toronto WQIP (MOE/Metro Toronto and Area Municipalities).
- . The report identifies MOE as the lead agency for:
  - policy development for stormwater and groundwater protection;
  - landfill leachate transport;
  - elimination/control of bacteria from agricultural sources; and
  - enhanced monitoring of groundwater, surface water, sediments and fish.



### Mimico Creek

- . Although this watershed is primarily urbanized, there are no direct industrial discharges. A major concern, however, is the stormwater runoff from residential and industrial areas, which is the the major source of pollutant loadings.
- . Dry weather outfall surveys have identified 194 outfalls. Thirty-five are on the Priority A outfall list for early attention.
- . The City of Etobicoke is conducting investigations and monitoring of storm sewer outfalls to further direct abatement actions.
- . Abatement actions identified for the Don and Humber Rivers will eventually be applied to Mimico Creek. The timetable and option selection will ultimately be considered in conjunction with Metro-wide abatement requirements, such as those in the Remedial Action Plan for the Toronto waterfront. Redevelopment will provide opportunities for the incorporation of stormwater quality controls.

### FUTURE ACTION:

- . Effective improvement actions for urban rivers in the Greater Toronto Area will require, in addition to the measures discussed, creative solutions and new approaches on the part of municipal and provincial agencies. Examples may include options for controlling stormwater runoff at the source and the control of combined sewer overflows.
- . Urban river rehabilitation in the Toronto area is going to be a long term, expensive undertaking that will require the cooperation and participation of all levels of government, private enterprise and the public.
- . Careful consideration and thoughtful input will be required on the part of all involved in setting priorities that balance the desires for water quality improvement along the waterfront with requirements for each of the watersheds. The success of rehabilitation efforts, however, will depend on the stakeholders' ability to fund these improvements.

### WATER RESOURCES BRANCH





ISSUE: Remedial Action Plans (RAPs) for Great Lakes  
Areas of Concern

BACKGROUND:

- . As a result of the International Joint Commission's (IJC) 1985 Report on Great Lakes Water Quality, Ontario in cooperation with the federal government, agreed to develop RAPs to restore beneficial uses in the 17 Canadian Areas of Concern.
- . Ontario Areas of Concern are:
  - Lake Superior: Thunder Bay, Nipigon Bay,  
Jackfish Bay, Peninsula Harbour
  - Lake Huron: Spanish River, Severn Sound,  
Collingwood Harbour
  - Lake Erie: Wheatley Harbour
  - Lake Ontario: Hamilton Harbour, Toronto  
Waterfront, Port Hope, Bay of Quinte
  - Connecting Channels: St. Marys River, St. Clair River,  
Detroit River, Niagara River,  
St. Lawrence River
- . Each RAP is to be submitted in two stages, including:
  - Stage I
    1. Definition of problem and extent of area affected;
    2. Identification of uses impaired;
    3. Description of causes of problems and pollution sources;
  - Stage II
    4. Remedial measures proposed;
    5. Details re: Public Consultation;
    6. Schedule for implementation and completion of remedial measures;
    7. Identification of agencies responsible for remedial measures;



8. Process for monitoring implementation; and
9. Surveillance and monitoring program to confirm restoration of uses.

A Provincial-Federal RAP Steering Committee plus 17 RAP Teams were set up in May 1986 by MOE, assisted by Environment Canada, to develop RAPs. Other Provincial and Federal representatives on the teams may include MNR, OMAF and the federal Department of Fisheries and Oceans.

An ADM-level RAP Interministerial Coordinating Committee was formed in September, 1989 to advise other ministries of their expected commitments and roles in implementing RAPs and to obtain ministerial positions on RAP implementation. The Committee is receiving RAP Stage I Reports and Options Discussion Documents for review and comment.

The Ministry of the Environment recently completed an analysis of the total costs of implementing RAP activities at all Areas of Concern. Total capital costs to be borne by a number of players including industry and municipalities are estimated at \$1.3 Billion (1989\$), with annual operating and maintenance costs estimated at \$150 Million per year for up to 20 years. There are cost implications to the province through proposed improvements to municipal sewage and stormwater control systems. A significant portion of these will be incurred through the MISA municipal program.

#### CURRENT SITUATION:

MOE has provided enhanced funding for RAP development, e.g., 1990-91: approximately \$1.9 million of which \$725,000 is dedicated to public involvement. Environment Canada increased its commitment from \$1.3 million in 1989-90 to \$2.2 million in 1990-91.

Through the Canada-Ontario Agreement Review Board, MNR has been requested to provide financial and technical support to RAPs. Although MNR has not fully responded to requests for investigations at RAP sites, the adoption of an ecosystem approach to fisheries management under the Strategic Plan for Ontario Fisheries (SPOFII) will be supportive of RAPs, particularly habitat rehabilitation.



- . The confirmation in 1990 by OMAF of a renewed Land Stewardship Program with a focus on environmental protection is also supportive of RAP implementation. Augmentation of LSP funding may be required to initiate sufficient farm sector remedial action at RAP sites.
- . A status report (First Report of Canada) was provided to the IJC as of December, 1988, in accordance with the new Canada-U.S. Great Lakes Water Quality Agreement Protocol. Status reports are to be submitted to the IJC biennially. The IJC reported progress under the Agreement at its Biennial Meeting in Hamilton, October, 1989. The second Report of Canada is under preparation.
- . The RAP process incorporates extensive public involvement in all phases of its development: defining water use impairment and water use goals and objectives; evaluating remedial options and preparing the draft plan; monitoring the implementation of the plan.
- . Public consultation programs are now underway for all 17 RAPs. Public advisory committees (PACs) have been formally established for all locations except Wheatley Harbour and Port Hope, where more informal mechanisms were adopted.
- . Ontario is working jointly with the State of Michigan to develop bi-national RAPs for the St. Marys, St. Clair and Detroit Rivers. This action stems from the Ontario-Michigan Letter of Intent on Shared Areas of Concern, signed by the Premier of Ontario and the Governor of Michigan. Bi-national (Michigan-Ontario) public advisory committees are in place for the St. Clair, Detroit, and St. Marys River RAPs.
- . Agreement has been reached with the State of New York and the U.S. Environmental Protection Agency to prepare joint statements of remediation problems and goals for the St. Lawrence River RAP. Public involvement programs will proceed independently in New York and Ontario, but with ongoing agency consultation.
- . On the Niagara River, New York maintains that the preparation of RAPs should be the responsibility of the respective State and Provincial agencies. Agreement has been reached on the establishment of an International Niagara River Citizen's Advisory Committee, with representation from the U.S. and Canadian RAP Public Advisory Committee.



The Federal government recently (March, 1990) announced details of its \$125 million 5-year Great Lakes Action Plan, including \$20 million for research on health effects, \$50 million for environmental investigations and \$55 million for implementation of remedial actions at Areas of Concern.

Detailed information is provided for specific areas of concern as follows:

#### Hamilton Harbour RAP

- . The Hamilton Harbour RAP is the most advanced of the 17 Ontario RAP areas. A stakeholders group of more than 40 members is active and currently assessing remedial options. A draft of preferred options was released for stakeholder review in January, 1990 and is currently undergoing revision.
- . Extensive technical investigations by all levels of government have been completed and are ongoing. The steel industry and local municipalities continue to implement water pollution control measures on the harbour.
- . Key measures include: remediation of contaminated sediments, reduction in ammonia loadings, control of combined sewer overflows, restoration of a self-sustaining fishery and protection of aquatic habitat.
- . An agreement and funding is in place to clean up Windermere Basin by dredging. Dredging has commenced but is recognized as a short-term solution.
- . An area of severely contaminated sediments has recently been identified adjacent to the Stelco site. Approximately twelve hectares of the Harbour are contaminated with coal tars. Remedial action is under active development.
- . The Ministry is sharing the cost of a study to examine the operational processes of the Hamilton Sewage Treatment Plant, a significant contributor of phosphorus and ammonia to the Harbour.
- . Submission of the draft RAP to the COA Steering Committee is projected for December, 1990.





## Metro Toronto RAP

- . A public involvement program is active and ongoing. A PAC based on sector sub-committees has been established. A statement of goals has been adopted by the PAC. The Draft Discussion Paper on Remedial Options was released in April, 1990 and is currently being reviewed by the PAC and Technical Advisory Committee.
- . Presentations were made by the PAC and RAP Coordinator to the Crombie Commission on the Waterfront. The Commission issued interim recommendations on environmental matters in late Summer, 1989. Mechanisms have been established to ensure cooperation and liaison between the RAP and the Commission.
- . Key issues include: remediation of beach closures, influence of watershed runoff and storm sewer effluent, protection of drinking water, and influence of sewage treatment plant effluent.
- . In 1989-90, MOE will spend \$675,000 on the Toronto RAP, including \$185,000 on public involvement activities.
- . RAP activities are being coordinated with other ongoing Regional activities:
  - Toronto Area Watershed Management Study (TAWMS);
  - Metro Toronto Waterfront Water Quality Improvement Program (WWQIP).

## Bay of Quinte

- . Technical studies have been carried out to better identify and measure nutrient loadings to the Bay and to better define the status of toxics and bacterial contamination. Sediments are emerging as an important ongoing source of nutrient pollution.
- . A range of remedial options focussing on nutrient load control have been identified and are currently under technical and economic assessment. An ecosystem-based analysis concluded that a variety of discharge controls along with reduced tributary



inputs will be required to reduce phosphorus concentrations in the Bay.

- . A PAC is active in setting water quality and water use goals and in evaluating remedial options. An options discussion paper, entitled "Time to Decide-Options Discussion Document" was released for public review and comment in September, 1989. Public meetings have been held and a PAC position paper on options was completed in April, 1990.
- . A draft plan is targetted for completion by December, 1990.

### Thunder Bay

- . Open houses were held in February, 1989, and a PAC was established in May, 1989. The PAC is currently focussing on the definition of impaired uses and use goals.
- . A number of technical studies have been completed or are ongoing, notably related to water quality, fisheries habitat, and fish population impacts on the Kaministiquia River.
- . Key issues include: remediation of beach closures, impacts of pulp and paper discharges, and localized contamination of harbour sediments.
- . The City of Thunder Bay is showing considerable interest in redevelopment of Harbourfront lands and has initiated a consulting study of development options.
- . The Stage I report is due to the RAP Steering Committee in the fall of 1990.

### FUTURE ACTION:

. Each of the final RAPs will have to identify the remedial options to be implemented, the agencies responsible and an implementation program. Implementation of each plan will require firm commitments from the municipalities and industries concerned as well as other provincial and federal government departments.



- . MOE is currently identifying existing and innovative funding mechanisms that can be applied.
- . As of September, 1990, ten of the 17 Ontario RAPs have Stage I reports (definition of environmental conditions, impaired uses and pollution sources) submitted to the RAP Steering Committee. Five reports have been submitted to the IJC for review.
- . All Ontario RAPs are currently scheduled for completion by the end of 1991. This date, however, is not firm, as the period required for obtaining stakeholder commitments cannot be predicted.

WATER RESOURCES BRANCH



ISSUE:       Canada-Ontario Agreement (COA) on Great Lakes  
                  Water Quality

BACKGROUND:

- .     The Great Lakes Water Quality Agreement, first signed in 1972 and revised in 1978, commits Canada and the United States to the restoration and maintenance of the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem.
- .     The Protocol to the Agreement signed November 18, 1989, strengthens the Canadian and United States Governments' commitment to reduce the discharge of pollutants, particularly persistent toxic substances into the Great Lakes system.
- .     The Canada-Ontario Agreement on Great Lakes Water Quality (COA) was revised in 1976, 1982 and 1986, and will expire on March 31, 1991.

CURRENT SITUATION:

- .     The Ministry spends approximately \$250 million per annum, in terms of salaries, DOE and transfer payments, on programs associated with the protection of the Great Lakes.
- .     The Federal Government's commitment of resources to annex requirements under the Canada-U.S. Great Lakes Water Quality Agreement is \$125 million over the next five years.
- .     The original Federal allocation of \$75 million is insufficient to meet the needs of the Protocol particularly relative to the high expected RAP implementation costs and \$20 million for a new Health Effects Program.

FUTURE ACTION:

- .     Arrangements under the COA agreement are under review within the Ministry in light of resources implications of annexes in the Great Lakes Water Quality Agreement in





1987 and the Ministry's concern about the disparity in expenditures between the Federal and Provincial governments.

INTERGOVERNMENTAL RELATIONS  
AND STRATEGIC PROJECTS



ISSUE:      Development of Guidelines for NDMA

BACKGROUND:

- . NDMA (N-nitroso-dimethylamine) is not produced for commercial purposes, but is an inadvertent by-product of the rubber manufacturing, leather tanning, pesticide manufacturing and food processing industries. NDMA is a potent carcinogen.
- . As a result of Drinking Water Surveillance Program sampling, three to four parts per billion of NDMA were found in drinking water in Elmira in November 1989.
- . An interim guideline of 14 parts per trillion (ppt) was adopted by MOE, which may be revised downward in the near future.
- . A Control Order was issued to Uniroyal in December 1989, limiting the concentration of NDMA that could go out of the plant and requiring Uniroyal to close its discharge operations if that limit was exceeded. Uniroyal was prohibited from discharging effluent to the Town of Elmira's sewage treatment plant on January 18, 1990 for approximately one week.
- . Again, from February 2 - September 17, 1990 Uniroyal was prohibited from discharging effluent to Elmira's STP.
- . This Control Order is currently under appeal. Uniroyal, however, has complied with the Order's requirements.
- . The Municipality has procedures in place to protect Elmira's drinking water. As well, the Ministry monitors the Sewage Treatment Plants, downstream Grand River conditions and drinking water intakes.
- . A comprehensive order dealing with groundwater contamination by Uniroyal was issued in August 1990. MOE expects total clean-up costs for all affected parties to be \$30 - 40 million. Uniroyal is expected to appeal this provision as well.
- . A major controversy at the Uniroyal/Environmental Appeal Board Hearing is the conflicting technical advice on guidelines for NDMA that have been provided by Uniroyal, Health and Welfare Canada and the Ministry of the Environment, and the Regional Municipality of Waterloo.
- . In response to the need for definitive guidelines and public pressures for MOE to change the guideline, an



Inter-Ministry NDMA Expert Committee was established to provide guidelines and associated risk levels based on health considerations.

- . The committee, which is chaired by MOE, was requested to make its recommendations by the end of July 1990.

#### CURRENT SITUATION:

- . The Committee's recommendations on guidelines and the associated risk levels were presented to Division Heads on August 20, 1990.
- . Major recommendations for the level of NDMA in each environmental medium with the associated incremental lifetime cancer risk were:
  1. Drinking water: 9 ppt ( $10^{-5}$ ) or 0.9 ppt ( $10^{-6}$ ).
  2. Ambient air: 0.7 ng/m<sup>3</sup> ( $10^{-5}$ ) or 0.07 ng/m<sup>3</sup> ( $10^{-6}$ ).
  3. Soil: no recommendation due to lack of information.

NOTE: The current average daily intake of NDMA in food is estimated to have an incremental lifetime cancer risk of  $2 \times 10^{-4}$ .

#### FUTURE ACTION:

- . Regional Operations is reviewing the implications of changing the guideline from 14 ppt to 9 ppt.
- . Ministerial direction is required on the following points:
  - the Ministry guideline and associated risk level.
  - the possible involvement of the Advisory Committee on Environmental Standards.

HAZARDOUS CONTAMINANTS COORDINATION BRANCH



ISSUE:        International Joint Commission - Water Quality  
Board Report to IJC

BACKGROUND:

- .     The 1978 Great Lakes Water Quality Agreement requires the Canadian and U.S. Federal Governments and those of the Great Lakes provinces and states to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes drainage system.
- .     The Water Quality Board's report to the International Joint Commission (IJC) calls on U.S. and Canadian governments to strengthen their toxic control and management programs, as well as to provide more detail about the Great Lakes clean-up programs.
- .     The report states that the process of developing RAPs for the 42 Areas of Concern is a bright spot in the programs to clean-up and restore the Great Lakes.
- .     The public hearings and meetings are getting people and communities concerned about their environment and involved in restoration programs.
- .     The report recommends that governments:
  - start managing their existing phosphorus control programs better and calls on the Canadian government to further reduce the content of phosphorus in laundry detergents;
  - protect wetlands and establish a registry listing losses of wetland areas;    and
  - investigate pollutants and their sources which are affecting the wetlands.
- .     Citing the problem of exotic fish and the zebra mussel carried into the lakes in ships ballast water, the report calls on the Federal Governments to examine their voluntary control guidelines and report to the Commission.





#### CURRENT SITUATION:

- . The IJC has studied the report together with 106 submissions by individuals, groups and associations and submitted its report to the Canadian and U.S. governments in April 1990. The report reiterated the points and recommendations made by the Water Quality Board.

#### FUTURE ACTION:

- . Environment Canada is responsible for the preparation of Canada's response to the IJC. This will be done by reporting progress with Federal and Provincial Great Lakes programs in a public document to be released early in January 1991.
- . Ontario did not get equal billing in a similar report published by Environment Canada in December 1988. An effort will be made to ensure that Ontario receives appropriate profile in the report.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS



ISSUE:      Zebra Mussel Infestation in the Great Lakes

BACKGROUND:

- .     The invasion of zebra mussels into the lower Great Lakes is creating a very serious problem with water treatment plant intakes and industrial establishments in Ontario, such as Hydro. Some water treatment plants reported 50% losses in intake pipe capacity as a result of zebra mussel colonization over the last couple of years.
- .     The most effective short-term solution, as agreed to by both Federal and Provincial governmental agencies, is the regulated use of chlorine.
- .     Prompt implementation of this short-term solution would allow for research, development and implementation of longer term solutions, including ozonation, physical/mechanical approaches, etc.
- .     Since surface water treatment plants in Ontario use chlorine for disinfection of drinking water, systems are already in place and staff are trained and experienced in the use and handling of this chemical. The zebra mussel problem could be dealt with by simply relocating the point of chlorine addition in the system to the mouth of the water intake pipe. Monitoring of trihalomethane would ensure that the drinking water meets Provincial objectives.
- .     Industry is required to ensure that the chlorine residual in its effluent is reduced to undetectable levels, consistent with Ontario Provincial Water Quality Objectives. In addition, monitoring of the area adjacent to the discharge point is required to identify and protect the aquatic environment.
- .     An amendment to Regulation 751 of the Pesticides Act was made on June 28, 1990 at which time it was recognized that "A water treatment chemical is exempted from the Act and this Regulation if its use is authorized under the Ontario Resources Act by an approval or a permit to take water for the purpose of discouraging or eliminating the attachment of molluscs to works under that Act".
- .     The MOE Zebra Mussel Committee initiated the short-term control option, and the Ministry prepared the "Guidelines on Applying for the Approval of Water and Sewage Works to Deal with Zebra Mussel Control".



- . To date, eight Municipal Approvals and 17 Industrial Approvals have been issued.

FUTURE ACTION:

- . Development of a long-term comprehensive zebra mussel management strategy is necessary.

APPROVALS BRANCH



ISSUE:      **Niagara River Improvement Project Activities**

BACKGROUND:

- .      Ontario established a special project team for the Niagara River in 1982 to provide liaison with environmental agencies of the Governments of Canada, the U.S., New York State and Ontario.
- .      In February 1987, the U.S. Environmental Protection Agency, Environment Canada, New York State Department of Environmental Conservation and Environment Ontario signed a Declaration of Intent, committing the four agencies to reduce loadings of persistent toxic chemicals to the area by 50% by 1996.

CURRENT SITUATION:

- .      Niagara River Improvement Project staff are involved in the following activities:
  - Toxics Management Plan;
  - River monitoring;
  - Point Sources monitoring of Niagara River pollution;
  - Non-Point Sources monitoring;
  - Chemicals of Concern loading reduction;    and
  - Remedial Action Plan (RAP) preparation.

FUTURE ACTION:

- .      The main thrust of activities by the Ministry and other agencies in forthcoming months will be to establish more accurate estimates of pollution from non-point sources.
- .      Monitoring and identification of significant point source discharges will continue. Modifications will be made to the program as the MISA program is implemented.





- . Continue to prepare the RAP. Ontario's intention is that the Niagara River RAP will be amalgamated with similar work to be undertaken by the State of New York.
- . Continue to review and add to the list of persistent toxic chemicals of concern as information becomes available.

INTERGOVERNMENT RELATIONS  
AND STRATEGIC PROJECTS



ISSUE:       Niagara River - Ontario Water Pollution Control  
                  Plants Discharges

BACKGROUND:

- .       Ministry of the Environment monitoring of Ontario water pollution control plant discharges to the Niagara River has identified three problem areas: Fort Erie, Niagara Falls, and Welland.

CURRENT SITUATION:

- .       The three plants were not in compliance according to the 1987 Report of Discharges from Municipal Wastewater Treatment facilities in Ontario. The specific parameters not in compliance were as follows:

Fort Erie	Biological Oxygen Demand (BOD), Suspended Solids (SS), Total Phosphorus (TP)
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Niagara Falls	Total Phosphorus (TP)
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Welland	Total Phosphorus (TP)
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FUTURE ACTION:

- .       MOE will continue routine inspections and monitoring.
- .       The plants will be subject to all requirements developed under MISA for the municipal sector.



ISSUE:        **Niagara River Project - Ontario Landfill Sites**

BACKGROUND:

- . Five of 17 Ontario landfill sites have been identified as having a potential to contaminate the Niagara River. These sites are:
  1. Atlas Steels, Welland;
  2. Cyanamid, Welland;
  3. Cyanamid, Niagara Falls;
  4. Fort Erie Municipal Landfill; and
  5. CN Rail, Niagara Falls.
- . The first four of these sites are under the jurisdiction of the Ministry while the fifth site is under Environment Canada's jurisdiction.
- . The first four sites under Ministry control were investigated by the Ministry or by the owners.

CURRENT SITUATION:

- . Atlas Steel - The prime problem source was an acid pit which has subsequently been removed. Waste acid is now being treated in-plant and is no longer poured into the landfill. The alkaline nature of slag, the approved waste solidification process and the engineered landfill are expected to remediate the problem.
- . Cyanamid, Welland plant - Problems identified during excavation activities for a wastewater treatment plant have been corrected. The company's consultant has completed Phase II hydrogeological studies; Phase I concluded that sufficient overburden existed to prevent extensive contaminant movement.
- . Cyanamid, Niagara plant - Investigations by the company's consultant found that contamination was far more extensive than indicated by the Niagara Region Toxic Committee (NRTC). The toxin involved is cyanide, a compound found to quickly degrade in surface waters. Preliminary conclusions were that the impact on the Niagara River would be negligible. Phase II investigations are continuing.
- . Fort Erie Municipal Landfill - Phase III investigations by the Town's consultant have indicated that there is no



impact on the Niagara River. Monitoring shows no toxic contamination problems and movement of a conventional contaminant plume off-site is assimilated within property boundaries.

FUTURE ACTION:

Further evaluation of the sites has been undertaken for the Ministry by a consultant. The consultant's report is expected in the Fall of 1990.





ISSUE:      **Spills to the St. Clair River**

BACKGROUND:

- . Due to the large petroleum and petrochemical industries in the Sarnia area, frequent spills occur into the St. Clair River resulting in considerable concern by the residents of Wallaceburg and downstream municipalities who obtain their water supply from the river.

- . The annual number of recorded spills were:

	<u>Total</u>	<u>From Chemical Valley</u>
1986	135	117
1987	124	102
1988	91	73
1989	131	106

- . Sixty-two percent of the spills are small (less than 100 litres or equivalent) and many (52%) are of low-toxicity materials such as oils, latex or coal dust.

CURRENT SITUATION:

- . Spills continue to occur and during 1989 it was necessary, on three occasions, to advise the temporary shut-down of the potable communal water intakes taking water from the River. Several times during 1990 the Wallaceburg Water Treatment Plant was advised, on a precautionary basis, to shut down. It was shut down once for an extended period of time due to a vinyl-chloride monomer spill.
- . MOE is preparing Director's Orders for the Chemical Valley industries to virtually eliminate spills to the St. Clair River. These Orders will enhance each company's spill detection capability, improve their diversion, containment and treatment facilities, and upgrade their emergency response plans. Companies will be required to identify areas where a risk of spills exist and to perform risk assessment. Finally, the companies will be required to provide environmental awareness training to their staff.
- . The companies are spending several millions of dollars to address these issues.



- . Pressure to extend the Huron Water System to serve the Town of Wallaceburg has resulted in the Ministry of the Environment agreeing to fund 75% of the installation.

FUTURE ACTION:

- . The Ministry will continue to expedite the Director's Orders and ensure compliance.
- . The Ministry will review the commitment to the Huron Water System as the municipalities have not agreed to pay the 25% share of the cost.

SOUTHWESTERN REGION



ISSUE:        Detroit/St. Clair/St. Mary's Rivers Project  
                 Activities

BACKGROUND:

- .     The Detroit/St. Clair/St. Mary's Rivers Improvement Project Team was created to coordinate Provincial efforts and to provide liaison with other governments to improve water quality conditions in the three rivers.
- .     The spill of perchloroethylene from Dow Chemical in 1985 resulted in the release of contaminants in the sediments (known as the "St. Clair River Blob") and heightened concerns regarding water quality downstream.
- .     The discovery of PCB contaminated sediment on the American side of the Detroit River and coal tar and polycyclic aromatic hydrocarbons (PAHs) in sediments of tributaries to the St. Mary's River have further heightened concern on both sides of the border.

CURRENT SITUATION:

- .     Current responsibilities of the Detroit/St. Clair/St. Mary's Rivers Improvement Project include:
  - ensuring that the recommendations of the Upper Great Lakes Connecting Channel Study (UGLCCS) are incorporated into the Remedial Action Plans (RAPs);
  - identifying and evaluating the impacts of point and non-point sources of water pollution to the Detroit River;
  - conducting a review of problems on Fighting Island, Detroit River and the Algoma Slag Disposal Site, St. Mary's River; and
  - completing a report on the results of an investigative study of the effect of deep well disposal of industrial wastes in the Detroit Formation, Sarnia.

FUTURE ACTION:

- .     Ministry staff will incorporate results of the multi-agency study into RAPs for the three interconnecting channels. Staff will also ensure that study results



provide background data for the application of the Water Quality Track of the Municipal-Industrial Strategy for Abatement for the Iron and Steel, Petroleum and Organic Chemical sectors in the connecting channels area.

. Reports on the Algoma Slag Disposal Site and the Sarnia Deep Well Disposal Study will be complete and released by the end of 1990.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS





ISSUE:        Northern Wood Preservers Inc.

BACKGROUND:

- . Northern Wood Preservers Inc. operates a sawmill and wood preservative treatment plant near the inner Thunder Bay Harbour. The plant has been in existence since 1935.
- . The plant has an annual production capacity of 120 million board feet of construction grade lumber and 60 million board feet of treated lumber. When operating at capacity, the plant employs 350 people and directly contributes \$11.5 million in mill workers' wages to the local economy.
- . In 1982, a new sludge waste treatment system, 99% effective in pentachlorophenol removal, was introduced to replace the old system.
- . Bio-assay samples of the effluent collected since 1984 range from non-toxic to toxic. MOE conducted a survey in October, 1986. No dioxins were detected in watercolumn samples. Results from effluent, soils, sediment and sludge sampling confirm the presence of hexa, hepta and octa dioxins and furans. No 2,3,7,8-TCDD was detected. Thunder Bay drinking water was tested in November 1986 and on several occasions subsequently, no dioxins were detected.
- . A Notice of Intent to Issue a Control Order was served on the company on October 30, 1987. The company objected to being held responsible for historic pollution. The Control Order was changed accordingly to deal with only ongoing operations and was served on November 30, 1987. The Order is being complied with.
- . A new Control Order was issued to Abitibi-Price Inc. (former site operator), Canadian National Railway Co. (owner of the site) and Northern Wood Preservers Inc. on December 23, 1987, directing the companies to jointly study and report the extent and degree of soil, groundwater and sediment contamination at the site. Each of the companies appealed the Order. A Minister's Order requiring compliance with the Director's Order was issued in February, 1988.
- . MOE made a motion before the Environmental Appeal Board to remove the stay of the Director's Order conferred by the Appeal Board. The motion was denied.



- . A report on the MOE sediment studies confirmed the need for a comprehensive clean-up of the harbour and also recommended an interim clean-up of pools of creosote on the harbour floor. An Environmental Assessment Act exemption and Security Account approval for an interim clean-up of pools of creosote on the harbour floor was obtained. One tanker truck full of creosote was removed from the harbour early in 1989.
- . As of December 13, 1989 the Environmental Appeal Board has heard the arguments of all parties. The Board has advised the parties it intends to reconvene the hearing on October 25, 1990 to examine clean-up requirements in detail.

#### FUTURE ACTION:

- . MOE staff are preparing a terms of reference for groundwater and soils studies.

#### NORTHWESTERN REGION



# AIR MANAGEMENT



ISSUE:      Countdown Acid Rain Program

BACKGROUND:

- .      The Countdown program delivers Ontario's contribution to the 1985 Federal-Provincial commitment of sulphur dioxide (SO<sub>2</sub>) reductions by 1994 for the seven eastern provinces.
- .      Countdown Acid Rain exceeds this commitment, and caps Ontario's SO<sub>2</sub> emissions at 885 kt/yr by 1994.
- .      The four regulations require reduced emissions from each of Inco, Falconbridge, Algoma (Wawa) and Ontario Hydro, (which collectively produce about 80% of SO<sub>2</sub> emissions in Ontario).
- .      Delivery of the requirements of this acid gas reduction program is carried out by MOE under the guidance of the Inter-Ministerial Countdown Implementation Committee.

CURRENT SITUATION:

- .      The four major sources were given a three year period, ending December 31, 1988, to perform research and development and decide how they will meet the new limits and costs involved.
- .      The final reports for the three-year planning phase were reviewed by the government and released to the public. The government response reports have been released to the public and Legislative Committee on General Government hearings held in June 1989.
- .      The Countdown program is on track and each of the four major stationary sources has shown, in detail, the means of reaching the 1994 emission limits.
- .      Consultants have been hired by the Ministry to examine existing emissions estimation methodology used by the four major emitters to determine their annual emissions of SO<sub>2</sub> (SO<sub>2</sub> and NO<sub>x</sub> for Ontario Hydro) and to recommend a procedure to independently audit the reported emission data (as recommended by the Standing Committee on Public Accounts).
- .      Ministry of the Environment staff have prepared a report which recommends an emissions verification program. The report has been approved by senior management and will be released to the public soon.





- . Each of the four companies affected by the Countdown Acid Rain program was issued an order under Section 17 of EPA in June to July 1990 to develop an SO<sub>2</sub> emissions (SO<sub>2</sub> and NO<sub>x</sub> for Hydro) reporting method based on a mass balance and/or continuous emission monitoring (CEM) system which can be independently verified by periodic audits.

#### FUTURE ACTION:

- . Communications activities in the U.S. will be reviewed in light of the proposed amendments to the U.S. Clean Air Act.
- . Progress reports from the four major Ontario polluters will continue through the implementation phase, and will be closely examined.
- . Work will continue on Phase II of the Countdown program, to cover new sources and smaller existing sources in a most cost-effective manner.
- . Ontario will be discussing with the Federal government and the other six eastern provinces how to assign the residual and yet unassigned portion of the Canadian 50% reduction and how to deal with sulphur dioxide emissions after 1994. Ministerial direction required.

APIOS COORDINATION OFFICE



ISSUE:      Countdown Acid Rain: Compliance Strategies and  
Actions in the United States

BACKGROUND:

1.    Ontario Sources

- Regulations were passed in December 1985, effective in 1986, placing acid gas emission limits on the four major corporate sources in Ontario, which together account for over 80% of the province's sulphur dioxide emissions.

<u>Source</u>	Legal Limits Sulphur Dioxide	
	<u>1986</u>	<u>1994</u>
	(kt)	
Inco	685	265
Falconbridge	154	100
Algoma (Wawa)	180	125
Ontario Hydro	370	175

- Ontario Hydro has an additional interim limit of 240 kilotonnes (kt) Sulphur Dioxide (SO<sub>2</sub>), effective in 1990. Also, the sum of Hydro's SO<sub>2</sub> plus Nitrogen Oxide (NO<sub>x</sub>) emissions was limited to 430 kt per year between 1986-1989, reduced to 280 kt per year in 1990 and cut again to 215 kt per year by 1994.
- Each of the sources is required to submit regular emission reports and to date each corporation has reported emissions which are less than the limit currently in effect.
- Each of the four sources was required to submit a progress report every six months, leading to a final report at the end of December 1988 (January 1989 for Hydro), showing the methods to be used and the costs. These reports have been received on time; have been scrutinized by MOE experts, and show adequate progress towards the goal.
- A summary and analysis of each report has been published and made available to the public.
- Ontario's Countdown program fits into the Federal-Provincial agreement which will cut emissions by 50% from the 1980 base case by 1994. This



agreement covers the seven provinces east of the Manitoba/Saskatchewan border.

## 2. U.S. Action

- . U.S. emissions cause about 50% of the acid deposition in Ontario. Even if Ontario cut emissions to zero, the province could not meet environmentally acceptable deposition levels without U.S. reductions.
- . Until recently, the U.S. position has been that not enough is known to be able to determine which states are responsible, and by how much.
- . President Bush announced proposed amendments to the U.S. Clean Air Act in June 1989. The Senate passed a Clean Air Act bill in April 1990 and the House of Representatives did likewise in May 1990. A House-Senate conference on the Clean Air Act is in progress now and new legislation (including a 10-million ton cut in SO<sub>2</sub> emissions) is expected this autumn.

## CURRENT SITUATION

### 1. Ontario Sources

- . The actions of the four major sources in Ontario to date are outlined in the published progress reports.

#### Inco

- . Has approved a \$69 million expenditure for technology to reject more sulphur-bearing pyrrhotite, which will cut emissions by about 100 kt/year.
- . Is moving to bulk concentrate smelting which will allow the capture of more high-strength SO<sub>2</sub> to be converted to saleable acid and liquid SO<sub>2</sub>.
- . Has opted for a new double contact acid plant near the flash furnaces.



- . Has expressed confidence that it will meet the 1994 emission limit, subject to timely approval at the next stage.

#### Falconbridge

- . Has maintained its approach of improving existing emission control systems in order to meet the 1994 limit.
- . Is concentrating on removing 65% of the sulphur in the concentrate during roasting, which goes to the acid plant.
- . Has expressed confidence that it will meet the 1994 limit.

#### Algoma Iron Ore Division, Wawa

- . This iron ore sintering plant cut its production capacity at Wawa from 2.0 million tonnes/year to 0.9 million tonnes because of economic conditions in the industry. This was a permanent reduction.
- . The company is also using lower sulphur iron ore as feed, which reduces emissions.
- . Consequently the 1994 emissions limit are already being met.
- . The company has been warned that if economic conditions improve, and it wishes to increase production, emission reduction technology would have to be put in place.

#### Ontario Hydro

- . Has formally submitted its Environmental Assessment (EA) proposal to retrofit flue gas desulphurization equipment (scrubbers) on selected coal-fired units.
- . The EA has been approved specifying conditions when different types of technology are to be applied to the three main plants (Lambton, Nanticoke, Lakeview).
- . Lower sulphur coal has also been purchased and is used.





- . Load shifting, conservation and efficiency improvements are also planned.
- . Emissions have met the regulated limits.
- . Low-NO<sub>x</sub> burners have been installed to cut NO<sub>x</sub> emissions.
- . Flue-gas conditioning equipment has been recently installed at Lambton and Nanticoke generating stations and an implementation schedule extending until 1994 has been provided for the Lakeview G.S. This modification will allow Hydro to burn lower sulphur coals at these stations and meet SO<sub>2</sub> emission limits during the interim period.
- . Hydro has expressed confidence that it will meet the regulated limits for 1990 and 1994.

## 2. U.S. Action

- . Contacts continue with members of Congress and their staff, to persuade them that acid rain is not just a Canadian problem.
- . A major communication effort has involved speaking engagements, displays at sportsmen's shows and other events, guided tours of Ontario and Quebec for Congressional staff, and publications for the public.
- . Legal action has continued. On November 1, 1988, a follow-up legal petition was submitted to a U.S. court by Ontario, designed to push the EPA to make a formal finding and take action against any offending states. However, on August 31, 1990, the Court denied Ontario's petition for review.

## FUTURE ACTION:

### 1. Ontario Source

- . Developments under the Countdown program will be closely monitored.
- . Reductions beyond the Countdown program must be considered.



## 2. U.S. Action

- . Ontario will have to decide whether to pursue legal channels once again and appeal the recent unfavourable decision by the U.S. Circuit Court of Appeals for the District of Columbia.
- . The new Congress will offer new opportunities to get Ontario's position across. Democratic control bodes well for legislative action along the line of bills which died in the last Congress. This is seen as a U.S. domestic issue.
- . Ontario's communication plan will be reviewed to meet the new situation.



ISSUE:      U.S. National Acid Precipitation Assessment  
Program (NAPAP)

BACKGROUND:

- .     The U.S. Acid Precipitation Act of 1980 mandates a ten year comprehensive research program (NAPAP) in order to provide a firm basis for policy development.
- .     The U.S. General Accounting Office (GAO) alleges that NAPAP experiments to reveal the effects of acid rain are poorly designed and will not provide conclusive results.
- .     NAPAP released its Interim Assessment Document on the Causes and Effects of Acidic Deposition. The document was widely criticized in the U.S. and Canada because the Executive Summary (written primarily by Dr. Larry Kulp) went far beyond the scientific findings of the body of the report, perhaps to provide a basis for the U.S. Administration to reject the development of U.S. acid gas controls in this century.
- .     The Canadian critique incorporating written comments from more than 30 top Canadian scientists was delivered to U.S. authorities and widely circulated.
- .     NAPAP published a document responding to the Canadian critique document.

CURRENT SITUATION:

- .     In December 1989 through January 1990, NAPAP released drafts for public review of its State of Science (SOS)/ State of Technology (SOT) reports. An international conference took place in February 1990, based on these reports with Ontario scientists presenting papers.
- .     Canadian peer reviewers found SOS/SOT reports more in line with their research than the earlier Interim Assessment document.
- .     An Integrated Assessment package was received August 30, 1990. It documents control strategy options and various scenarios for implementation. This report is currently being reviewed by Ontario scientists.
- .     The Ministry (APIOS) along with Environment Canada participated in the final Task Force meeting of NAPAP on



September 5-6, 1990 in Washington, D.C. The main highlights of this meeting are:

- (a) Dr. Mahoney, NAPAP Director's introductory remarks indicated that NAPAP's 10 year study had shown that acid rain is neither a non-issue nor a catastrophe.
- (b) There is general support for 10 million ton reduction as proposed in the intended U.S. Clean Air Act (CAA) legislation.
- (c) References to economic benefit might imply debates on or delays in the implementation process even if CAA amendments are passed in view of the current U.S. budgetary situation.

Ontario strongly feels that acid gas emissions reduction in the United States is imperative and Ontario supports the CAA amendments to reduce 10 million tons of SO<sub>2</sub>.

#### FUTURE ACTION:

- Ontario scientists will continue to participate in NAPAP SOS/SOT and Integrated Assessment report review process upon invitation and when deemed appropriate.
- Final versions of the SOS/SOT reports, incorporating comments on and criticisms of the public review drafts, are expected December this year.
- Federal-Provincial RMCC will release state-of-the-science assessment reports on acid rain in October, 1990.

APIOS COORDINATION OFFICE





ISSUE:      **Global Warming Strategy**

BACKGROUND:

- . Findings of the Intergovernmental Panel on Climate Change (IPCC) established under the World Meteorological Organization and the United Nations Environment Program support the reality of global warming and the need for action.
- . Canadian Council of Ministers of the Environment (CCME) has taken the lead in developing a national plan. A committee of environment deputies was instructed by CCME to develop a strategy in cooperation with a committee of energy deputies. A report on the strategy will be available at the November 1990 CCME meeting.
- . Ontario Ministry of Energy initiated an interministerial work group to develop a discussion (green) paper "Global Warming: Towards a Strategy for Ontario" which was released in March 1990, with comments invited by July 31, 1990. A policy (white) paper is anticipated for October 1990.
- . Ministry of the Environment comments to the green paper expressed the need to reach 80% of 1988 CO<sub>2</sub> emissions by 2005 rather than Energy's proposed stabilization of CO<sub>2</sub> emissions at 1989 levels by 2000.
- . Ontario Round Table on the Environment endorses no targets but lists commonly quoted goals such as stabilization of CO<sub>2</sub> by 2000, 20% reduction in CO<sub>2</sub> by 2005 and 70-80% cuts in CO<sub>2</sub> by 2030, stating that opportunities exist now, and tomorrow these options may not be available to us.
- . In May 1990 at the Bergen, Norway Conference, Canada's Federal Environment Minister adopted the position that Canada's CO<sub>2</sub> emissions would be no higher in 2000 than they were in 1990.

CURRENT SITUATION:

- . A comprehensive national action strategy on global warming should be available for the November 1990 CCME meeting. Phase I of the strategy consists of cost-effective measures while Phase II will entail more costly initiatives possibly requiring structural and lifestyle changes.



- . The strategy will likely be released to Canadians as part of the Green Plan later in November.
- . The Federal approach appears to be to use the above approach to educate Canadians regarding the lifestyle changes which may be necessary over the next decade to achieve the 20% reduction target, before committing to the target.

#### FUTURE ACTION:

- . Global warming requires aggressive action and as a first step to stabilize greenhouse gas concentrations, Ontario should support a 20% CO<sub>2</sub> emissions reduction from 1988 levels by 2005. An Ontario position should be determined by Cabinet before the November 28 - 29, 1990 CCME Ministerial meeting in B.C.
- . Upcoming international meetings on global warming include the tabling of the IPCC report at the United Nations General Assembly and the Second World Climate Conference both in Geneva, October-November, 1990.
- . Negotiations for an international climate convention will take place through 1991, with 1992 as the possible date for completion of an agreement document ready for signatures at the Brazil meeting.

APIOS COORDINATION OFFICE



ISSUE:      NO<sub>x</sub>/VOC Management Plan

BACKGROUND:

- . CCME Ministers at the Fall 1988 meeting directed that a plan be developed to address domestic air quality (especially ground level ozone exceedances) through multi-stakeholders consultation for consideration at their Fall 1990 meeting.
- . A draft plan was released on March 1, 1990 followed by a 60-day public comment period. The final draft, incorporating public comments, was distributed to Deputy Ministers at the CCME Deputies' meeting August 21, 1990.
- . The plan has been developed in a multi-phase approach. Assuming U.S. Clean Air Act amendments are passed, the first phase will substantially reduce the areas affected by elevated ozone by controlling four broad source categories: transportation, power generation, product modification and industrial facilities.
- . Fifty-eight specific measures and 24 studies are recommended in Phase I of the plan.
- . Implementation implications for Ontario: most of the specific measures recommended in the plan will be implemented in Ontario via the Clean Air Program and the vehicle emissions strategy. The measures proposed by Ontario can be adopted well in advance of 2005.
- . It is estimated that implementing all of the 58 measures in Phase I will cost \$100 million to Federal and Provincial governments over a five year period; Ontario's share is estimated to be \$9.94 million and 84 person-years. It will also cost \$530 million per year to Ontario industry by 2005.

CURRENT SITUATION:

- . The NO<sub>x</sub>/VOCs report has been sent to stakeholders for final comment and options will be generated for Ministers' approval at the upcoming November CCME meeting.



FUTURE ACTION:

- . Scheduled second (1994) and third (1997) versions of the plan will define further reductions to consistently attain the 82 ppb objective by 2005 in all areas of Canada.
- . Efforts are being made to establish a transboundary air quality agreement with the United States which would focus first on sulphur dioxide, but under which ozone, NO<sub>x</sub> and VOCs could eventually be included (see briefing note on Canada-U.S. Air Quality Accord).

APIOS COORDINATION OFFICE





ISSUE:      **Canada - U.S. Air Quality Accord**

BACKGROUND:

- .      Negotiations between Canada and the U.S. regarding the long range transport of air pollutants first began in 1978. Ontario was represented on the Federal negotiating team.
- .      In 1979, Canada and the U.S. signed a Joint Statement. This was followed by the signing of the Memorandum of Intent (MOI) in 1980. The MOI committed both sides to the negotiation and creation of an air quality control treaty.
- .      Formal negotiations for an acid rain agreement broke down in 1982 when the American negotiating team rejected a Canadian proposal for a 50 percent reduction in SO<sub>2</sub> emissions from Eastern Canada and a parallel rollback in the U.S.
- .      In 1987, Canada and the U.S. established a Bilateral Advisory Consultative Group to discuss an acid rain accord. However, the U.S. was still not willing to negotiate reductions in SO<sub>2</sub>.
- .      In June 1989, President Bush, fulfilling a campaign promise, announced proposed revisions to the U.S. Clean Air Act which would achieve substantial reductions in emissions of sulphur dioxide and nitrogen oxides. Also included are new measures to curb automobile pollution, and strict controls on toxic air pollutants. The revisions are currently under joint review by the Senate and the House of Representatives, and it is expected that a new Clean Air Act will be passed by the end of 1990.

CURRENT SITUATION:

- .      At the recent G-7 meeting in Houston in July 1990, Prime Minister Mulroney and President Bush called for formal negotiations on an air quality accord to begin shortly.
- .      Ontario has not been invited to participate in the negotiations, which began on August 28, 1990.
- .      The accord is to be a framework air quality agreement capable of dealing with all scales (i.e., sub-



continental, regional and local) and all types (i.e., SO<sub>2</sub>, ozone, NO<sub>x</sub>/VOCs, etc.) of air pollution problems.

- . Provinces will have to be involved in implementing commitments made by Ottawa in the accord. For some types of pollutants, current Federal-Provincial agreements will serve, e.g., SO<sub>2</sub>, for others, new agreements will have to be negotiated.

#### FUTURE ACTION:

- . Ontario will closely monitor the Canada-U.S. negotiations. The effectiveness of agreements reached and their impacts on Ontario's environment will be especially scrutinized.

APIOS COORDINATION OFFICE



ISSUE:      Detroit Energy-From-Waste Incinerator (EFW)

BACKGROUND:

- .      In 1982, Combustion Engineering applied to Wayne County and the State of Michigan for authority to construct one of the world's largest EFW incinerators in the City of Detroit. A permit to build the incinerator was granted in 1984 by the Michigan Air Pollution Control Commission.
- .      Subsequently, the permitting authority unsuccessfully attempted to impose state-of-the-art control technology prior to construction of the facility. The U.S. Environmental Protection Agency (EPA) also attempted to impose state-of-the-art pollution control technology by revoking the permit issued by the State authority but was blocked by a court action in 1986. Ontario prepared a brief for the court in support of the U.S. EPA decision.
- .      Energy from Waste (EFW) plants recently built in Ontario have been required to install state-of-the-art technology as a condition of approval.
- .      When the U.S. EPA announced it would no longer pursue legal action, Ontario filed suit. The suit was filed on April 15, 1987, in Wayne County Michigan State Court to have state-of-the-art technology installed pursuant to provisions of the Michigan Environmental Protection Act. Four environmental groups also filed a common suit on that date in the same court under the same statute.
- .      The defendants in the Ontario suit (the Greater Detroit Resource Recovery Authority - GDRRA and Combustion Engineering Inc.) removed both suits from the State Court to the Federal Court where the U.S. EPA's attempt to revoke the permit was ruled against. After motions and appeals from both sides Ontario succeeded in having the case sent back to the Michigan State court.

CURRENT SITUATION:

- .      The defendants brought a pre-trial motion in Michigan to have the Ontario action dismissed. Judgement on the motion was given on March 2, 1990 and the defendant's motion was denied. Accordingly, our action may now proceed to trial.



- . The incinerator is currently operating. To date, public and diplomatic pressure has not been successful in persuading the GDRRA to install state-of-the-art emissions control.
- . MOE and Environment Canada are implementing an ongoing air monitoring program in the Windsor area to provide background information and to detect any changes in air quality attributable to the incinerator. Current air quality in Windsor is not typical of a Canadian urban community of its size due to its proximity to the city of Detroit.
- . Early stack results indicated problems with hydrogen chloride and mercury. To date, steps taken to resolve these issues have met with moderate success.
- . The Michigan Air Pollution Control Commission required Wayne County and Commission staff, in consultation with the Michigan Attorney-General, to draft a legally enforceable agreement regarding the Detroit incinerator before the Commission hearing on April 17, 1990. The agreement required evaluation of the Best Available Control Technology (BACT) for hydrogen chloride and mercury emissions and a schedule for immediate penalties, including shut-down, if there was non-compliance.
- . The Wayne County Air Pollution Control Division has verified excessive odour emissions in a report dated February 20, 1990 and has required the submission of a plan to control the odorous emissions. The Greater Detroit Resource Recovery Facility committed to providing Wayne County with an odour control study in May 1990.
- . On Tuesday, April 17, the Michigan Air Control Commission voted to stop Detroit from running its incinerator. The Commission withdrew the operating permit after hearing testimony that the incinerator continues to violate its permit requirements for mercury emissions. Subsequently the incinerator was shut down.
- . Ontario appeared before the Air Control Commission on May 2 to present the Province's position to oppose the re-startup of the incinerator.





- . A special meeting of the Air Pollution Control Commission was held to discuss a proposed consent order which was signed on May 3, 1990 by Michigan Department of Natural Resources (MDNR), GDRRA and Combustion Engineering. It required tougher controls on the Detroit Incinerator and allowed the incinerator to resume operation at a reduced capacity (60%).
- . Under the consent order, the first scrubber will be installed on one unit by December 1992. Subsequent retrofitting on the second and third units will occur in 1994 and 1995. Should baghouses be necessary, they would begin installation in 1995, and be complete in 1997.

FUTURE ACTION:

- . Ontario will continue with the court action by exchanging witness lists; getting a motion (objecting request for MOE 1987 Discussion Package and questions on MOE legislation and policies) heard on September 7, 1990; completing Discovery on October 10, 1990; completing pre-trial motions by October 30, 1990; conducting a pre-trial conference on November 15, 1990 and preparing for the trial (expected to take place in January or February 1991).



ISSUE:      Michigan-Ontario Memorandum of Understanding

BACKGROUND:

- .     Despite the provisions in the Michigan-Ontario Memorandum of Understanding, the Ministry has been frustrated in its attempts to gain access to detailed information on waste facilities proposed for the Detroit Area/Michigan.
- .     The St. Mary's Peerless Cement Company proposed burning waste solvent in its cement kiln. Detailed information was not made available to the Ministry until after the County had completed its review and the matter was referred to the Michigan Air Pollution Control Commission for approval. The Ministry has subsequently been involved in upgrading the proposal in several respects, although not to a level considered acceptable.
- .     Oakland County's proposal for an energy-from-waste plant to burn municipal refuse came to MOE's attention through a reference in the Windsor Star. The proposed site is about 32 km (20 miles) from the Ontario border. Attempts by Ministry staff to acquire information generally available to the public in the area were greeted with a request that the Ministry formally request the information in writing.

CURRENT SITUATION:

- .     Michigan informs the Ministry of proposals of potential interest only when they are actually the subject of permit applications. The Ministry has not been able to review the information submitted in support of the application until the permitting authority has finished its review.
- .     Windsor's City Council, and many of its citizens, are alarmed over the proliferation of incineration proposals, and hazardous waste destruction proposals in particular. They look to the Ministry to protect their interest in the area of air quality and transboundary problems.
- .     A significant number of hazardous and municipal waste incinerator proposals are expected for the industrial area of Detroit over the foreseeable future. The two



referred to in this report are under active development.

- . A Permit to Install was granted (August 1989) by the Michigan Air Pollution Control Commission to Peerless Cement. A permit to operate must be obtained before the Company can start burning hazardous waste and begin stack testing.
- . A contract was awarded to the Westinghouse Electric Corporation for the Oakland County facility, which will include acid gas scrubbers and baghouses. The County has submitted an application to the Michigan Air Pollution Control Commission for an air use permit, with a hearing targeted for mid-October.
- . Private backers have recently proposed an energy-from-waste incinerator (Monroe Energy Centre (MEC)) for Monroe County. The proposed facility will process 850 tons per day of waste, 750 tons of which would be burned. The project is currently at a very early stage and estimates are that it would require at least four to five years of review, beginning with a technical review panel at the County level, before any decision could be taken on construction.
- . Agreement was reached in August 1990 between the Ministry and the Wayne County Air Pollution Control Division on a more effective arrangement for involving the Ministry at an early stage on major proposals with air quality impacts on Ontario.

#### FUTURE ACTION:

- . A mechanism whereby Ontario is updated by Michigan on the existence and status of major proposals with air quality impacts on areas in Ontario, regardless of whether permitting applications are being processed, should be set up as soon as possible under the Michigan-Ontario Memorandum of Understanding. The Ministry should be prepared to do the same for Michigan as part of the same management.
- . Ministry staff will continue to monitor developments regarding the incinerators and assess potential impacts, if any, on Ontario.



# ENVIRONMENTAL ASSESSMENT





ISSUE:        Solid Waste Environmental Assessment Plan (SWEAP)  
                 - Metro Toronto

BACKGROUND:

- .     In 1986, Metropolitan Toronto, and the Regional Municipalities of York and Durham agreed to prepare a waste management master plan.
- .     Due to contractual arrangements, Metro Toronto is required to accept York Region's waste to the year 2003 at their facility. Metro is also required to accept an agreed allotment of waste from the Towns of Pickering and Ajax as long as Metro is operating a landfill site in Durham Region.
- .     In 1988 both York and Durham Councils withdrew from direct participation in the SWEAP process.
- .     In March 1989, the Chairmen of the Greater Toronto Area (Metro, York, Durham, Peel and Halton) issued a proposal to handle the area's waste in the short and long term. It was decided that municipalities would continue with their master plans while the Chairmen's proposal was developed.
- .     In January 1990, Metro issued a report entitled "Towards a Master Plan" in which they outline a number of proposed systems for Metro's waste.
- .     In April 1990, Metro initiated discussions with MOE concerning the methodology used for siting their proposed undertakings.

CURRENT SITUATION:

- .     Metro presently handles 3,294,000 tonnes of waste a year at its two disposal facilities, Keele Valley and Brock West landfill sites. It is anticipated that Brock West will close in 1991. Keele Valley is to be closed in 1993.
- .     Metro has announced that it hopes to "fast track" its EA process, that is, it is looking for dedicated resources from the Province, and high priority for review.



FUTURE ACTION:

- . The Ministry will continue to provide advice and comments on the SWEAP process.



ISSUE:      Northern Resource Planning and Development

BACKGROUND:

- . The lack of policy and planning mechanisms to address northern resource planning and development has been recognized for over a decade.
- . The Environmental Assessment Act (EA Act) currently applies to provincial and municipal undertakings, the most environmentally significant of which are timber management, hydro-electric development and transmission, and transportation.
- . The Ministry of Natural Resources' land use planning program has not been subject to the EA Act; timber management has been exempt from the EA Act and has been the subject of hearings before the EA Board since January, 1988. MOE agreed to extend exemption orders for parks on the condition that MNR prepare and submit its Class EA by December 31, 1990.
- . Ontario Hydro's activities are currently subject to three Class EAs and many individuals EAs. In December, 1989, Ontario Hydro submitted its 25-year Demand/Supply Plan for approval under the EA Act; intervenor funding has been submitted, and hearings before the EA Board are expected to begin January, 1991.
- . Private developments, which in the north are predominantly mines, hydro-electric dams and tourism facilities, are subject to the EA Act only if designated by Cabinet. Since the EA Act is the only comprehensive planning tool for addressing private sector projects in the unorganized territories, Ontario recognized that unless the issues involved are addressed by new planning initiatives, further requests for designation under the EA Act are expected.
- . On September 28, 1989, Mr. Bob Rae, Leader at that time of the Official Opposition, requested a comprehensive review of Ontario Hydro's plan to undertake \$5 billion worth of hydro-electric development in the Moose River Basin.

CURRENT SITUATION:

- . On May 18, 1990, in response to Ontario Hydro's Demand/Supply Plan and related hydraulic plans for the Moose



River Basin, the Moose Factory First Nation requested an environmental assessment of the cumulative effects of all Ontario Hydro and private hydro-electric developments in the Moose River Basin, including roads and transmission lines.

#### FUTURE ACTION:

- . Self-government negotiations with Nishnawbe-Aski Nation (NAN) are the most significant initiative in northern planning. Beginning with environmental protection this winter, it is anticipated that the next items for negotiation will be land use planning and environmental assessment. It is anticipated that, for off-reserve Crown land, NAN will be looking for an enhanced role in MOE's EA program and MNR's land use planning along the lines of the co-management arrangements made with the Teme-Augama Anishnabai, and proposed for the Windigo and Shibogama tribal councils.
- . The revised Mining Act must be prepared for promulgation by finalizing the draft regulations and establishing MOUs between MOE and MNDR for the implementation of the changes.
- . An emerging issue with timber management is the need for a conflict resolution process to address bump-up requests for individual assessment of timber management plans.
- . Ontario Hydro's DSP, the requests for designation of private hydro developments in the Moose River Basin, and a proposed Class EA for private small-hydro, require a comprehensive review of Ontario's policies and programs for private hydraulic development.





ISSUE:        Timber Management Class EA Hearing, Ministry of  
                 Natural Resources

BACKGROUND:

- .        The Ministry of Natural Resources (MNR) submitted a Class Environmental Assessment for Timber Management to the Minister of the Environment.
- .        Timber Management includes the activities of access, harvest, renewal, and maintenance, in forest management units on Crown Land in Ontario.
- .        Timber Management has been exempt from the EA Act since 1976. There has never been an environmental assessment prepared for a forest management unit.
- .        The decision on acceptance and approval of the Class EA was referred to the Environmental Assessment Board on October 14, 1987.
- .        MOE published the Government Review and the Notice of Completion on December 16, 1987.
- .        Intervenor funding of \$300,000 was provided.
- .        The Intervenor Funding Panel of the EA Board held funding hearings and issued its decision on February 29, 1988. The funding was divided between three native groups and a coalition of environmental groups called Forests for Tomorrow.
- .        The hearing commenced in Thunder Bay, Ontario on May 10, 1988. The MNR was the first party to present evidence.
- .        In 1989, an additional \$900,000 in Intervenor Funding was issued.
- .        The MNR completed its presentation of evidence in January 1990. The Forest industry was next to present evidence. In January 1990, the hearing location was moved to Toronto.
- .        In February 1990, all parties met for a two week period to negotiate the terms and conditions which could be applied if an approval were issued by the Board. The intention was to get agreement on as many areas as possible in order to reduce the length of the hearing.
- .        There was little agreement on any of the terms and conditions.



#### CURRENT SITUATION:

- . A number of satellite hearings have been held in various towns and cities in northern Ontario and additional satellite hearings were scheduled for August and September of this year.
- . The hearing recessed for the summer break but has resumed with the above satellite hearings. Forests for Tomorrow is expected to begin presenting its evidence in Toronto in October 1990.

#### FUTURE ACTION:

- . The hearing is expected to continue for another 12 months or more.
- . Informal discussions will continue regarding possible ways to reduce the length and cost of the timber hearing without compromising the hearing process.



ISSUE:        **Environmental Assessment Requests for Individual  
Timber Management Plans**

BACKGROUND:

- .        Since March, 1988, the Minister has received designation requests for 12 timber management plans.
- .        The Ministry has recommended the designation requests for the Lanark and the Timmins Forests be denied.
- .        Two designation requests, for Temagami-Latchford and Algonquin Provincial Park forests, have been denied. This brings the total number of outstanding designation requests for individual timber management plans to ten, including the forests of Magpie, Ranger Lake, Nakina, Tweed, Trout Lake, Georgian Bay, Aulneau, Watabeag, Lanark and Timmins.
- .        MNR staff agreed to take the idea of an independent mediator to hear the disputes and decide on their resolution.

CURRENT SITUATION:

- .        The Minister recently received a letter from Mr. Grant Tunnicliffe, the man who requested the designation of the Timmins forest. The letter stated that MNR has told Mr. Tunnicliffe that they are considering proceeding with timber management activities without waiting for a decision by the Minister of the Environment. The letter states that they have already done so for the Trout Lake and Magpie plans.
- .        MNR is within its legal rights to proceed with timber management as it is exempt under MNR 11/9, however, this would show bad faith and a lack of communication and cooperation between the two ministries and is of great concern to MOE.
- .        A Ministerial request to the Environmental Assessment Advisory Committee (EAAC) to hold hearings for three of the individual plans, Magpie, Timmins, and Ranger Lake, was considered. The Deputy Minister requested that the EAAC await confirmation from the new Minister before proceeding. The EAAC will begin to review the bump-up request, but will not hold public hearings until the request is reaffirmed by the incoming Minister.



FUTURE ACTION:

The Environmental Assessment designations require review and decisions by the Minister of the Environment. Discussions must be held between senior management of MOE and MNR to resolve this issue.





ISSUE:        Ministry of Natural Resources' (MNR) Provincial  
                 Parks Program Class Environmental Assessment (EA)

BACKGROUND:

- .     The Ministry of the Environment (MOE) agreed to extend MNR's exemption orders for parks [MNR-30/9 (management, operation and maintenance of existing parks) and MNR-44/2 (acquiring and managing land for new provincial parks)] on the condition that MNR prepare and submit its Class EA by December 31, 1989.
- .     MNR had committed itself to developing a Parks Class EA in 1980. However, MNR has repeatedly requested and obtained extensions to its exemption order on the basis that they were not able to develop the Class EA for various reasons. The unanticipated heavy involvement of MNR in the Timber Management hearings was cited as the latest reason. There continues to be high public expectations that this Class EA be expeditiously submitted and reviewed.

CURRENT SITUATION:

- .     In June 1990, MOE agreed to extend MNR's exemption order for parks (MNR-30/10) on the condition that MNR submit by December 31, 1990, a schedule for completion of the Class EA.

FUTURE ACTION:

- .     The Ministry expects that MNR's Class EA will require a further extension due to the continuing timber management hearings.
- .     In anticipation of MNR's need for a further extension, Ministry staff will meet with MNR on October 2, 1990, to discuss a schedule for completion of the Class EA. The EA Branch will ensure a schedule is submitted prior to an extension to the existing order.



ISSUE:      Proposed Federal Canadian Environmental  
Assessment Act (CEAA)

BACKGROUND:

- . On June 18, 1990 the Federal Minister of the Environment, Robert DeCotret tabled the Federal Government's Environmental Legislation, Bill C-78, hereinafter referred to as the Canadian Environmental Assessment Act (CEAA).

CURRENT SITUATION:

- . In general terms, the Act applies to any Federal authority which includes a Minister, Federal agency or Federal government department or departmental corporation (with certain noted exceptions such as harbour commissions, native band councils).
- . An Environmental Assessment is required for projects (subject again to certain classes of excluded projects) wherein the Federal authority is the proponent of the project. It provides financial assistance to enable a project to be carried out, administer Federal lands or transfer the administration of control of those lands to a Province for the purpose of enabling the project to be carried out.
- . The purposes of the Act are (a) to ensure that the environmental effects of projects receive careful consideration before responsible authorities take actions in connection with them; (b) to encourage responsible authorities to take actions that will promote and maintain a healthy environment and a healthy economy and; (c) to ensure that serious adverse environmental effects of projects to be carried out in Canada on Federal lands do not occur outside the jurisdiction in which the projects are carried out.
- . An exclusion list of apparently environmentally appropriate projects is to be developed.
- . It is not clear the extent of public participation that will be provided in the exemption process. Most significant in the omission from the legislation are the criteria by which projects will qualify for this exclusion list. Critics of the Act will likely see this lack of statutory criteria as a loophole that could be subject to abuse.



- . The "responsible authority" conducts a self-assessment. If the authority determines that there are no significant environmental effects or such effects can be mitigated, the projects can proceed if, in the case when mitigating measures are required, those measures are in place.
- . When a responsible authority determines that a project will have significant adverse environmental effects that may not be mitigable or if the projects has attracted considerable public interest or concern, the project will be referred to the Minister of the Environment to either go before a review panel, and undergo an environmental assessment, or else go for mediation.
- . The Act provides for mandatory follow-up programs which require a responsible authority to design a program that is in accordance with the regulations and is appropriate for the particular project. Although such a program is mandatory for certain projects, the specifics of the design of the project and its implementation are left entirely to the discretion of the responsible authority.
- . With respect to projects that are described in the mandatory study list or are referred to mediation or a review panel, the exercise of any power or the performing of any duty or function that would permit a project to be carried out in whole or in part until the assessment is completed is prohibited.
- . The discretion accorded the Minister, Cabinet and the "responsible authority" could still lead to the avoidance of full environmental assessments and complete public reviews if it is exercised so as to exempt projects from environmental assessment, if narrow determinations of what constitute significant adverse environmental effects are made or follow-up programs are limited in scope. How the Act is to be applied remains to be seen.

#### Implications for Ontario

- . The CEAA deals with joint review panels, whereby the Federal Minister of the Environment may establish a review panel jointly with a number of jurisdictions, among them being "the government of a province". The Federal Minister of the Environment may establish a joint review panel



where two "jurisdictions" have a responsibility or an authority to conduct an environmental assessment of a project.

- . The CEAA also deals with projects having transborder and related environmental effects and refers to the Federal Minister of the Environment being in a position to establish a review panel to conduct an assessment of the interprovincial environmental effects of a project.
- . The Minister shall not establish such a review panel where the Minister and the governments of all "interested provinces" have agreed on another manner of conducting an assessment of the interprovincial environment effects of the project.
- . With respect to interprovincial effects, the province may be affected by this legislation in that they may either want to have input into the composition of the review panel or they may want to suggest another manner of conducting an assessment of the interprovincial environmental effects of the project.





ISSUE:        Proposal by St. Lawrence Cement Inc. to modify  
                 their Mississauga plant to allow the use of Refuse  
                 Derived Fuel (RDF)

BACKGROUND:

- .        Since 1984, St. Lawrence Cement Inc., as part of a program to evaluate methods to reduce fuel costs, has been studying the concept of recovering Refuse Derived Fuel (RDF) from non-hazardous Municipal Solid Waste, and using the RDF to supplement the coal currently used at its Mississauga plant.
- .        The undertaking involves the recovery of approximately 100,000 tonnes of RDF from a maximum of 250,000 tonnes of municipal solid waste per year. The residential waste will be from Peel and Halton Regions. Only in extreme cases will waste from other municipalities be imported to achieve required waste volumes.
- .        Ash from the RDF will be incorporated into the finished raw cement produced, as the coal ash is now.
- .        Public concerns with the proposal include increased air emissions and increased truck traffic.
- .        The Company has formed a Project Study Group, with a majority of members having no connection with St. Lawrence Cement.
- .        A Community Liaison Committee was established to act as a focal point for communication between the public and the Project Study Group.

CURRENT SITUATION:

- .        Review of the draft of the Environmental Assessment documented is expected to be complete by the end of August. The proposal by St. Lawrence Cement was designated under the Environmental Assessment Act in late July, 1990. The company has indicated that the final Environmental Assessment document will be submitted for government review in the fall.



FUTURE ACTION:

- . Local community groups want to meet with the Minister as soon as possible. They will urge the Government to tell St. Lawrence Cement that the EA will not be allowed to proceed until all existing problems at the plant be satisfactorily resolved.



ISSUE:        Consolidated Professor Mines Ltd. - Shoal Lake  
                 Duport Mine Proposal - Environmental Assessment

BACKGROUND:

- . Shoal Lake is an inter-provincial water body; the City of Winnipeg draws water from Indian Bay at about 60 million gallons per day with chlorination and fluoridation as the only forms of treatment.
- . Consolidated Professor Mines Ltd. is a small private-sector mining company which has been undertaking an underground exploratory program at Stevens Island on Shoal Lake for over ten years to delineate ore reserves for gold content.
- . In May 1989, Consolidated Professor submitted a formal application for approval of a waste disposal system to dispose of tailing from a proposed full-scale mining and milling operation.
- . There has been and continues to be opposition to the proposed mine, first from local cottagers, and then from the Government of Manitoba, the City of Winnipeg and the Winnipeg Water Protection Group (WPG), an association claiming to have a membership of over 350.
- . Following a number of requests, the Shoal Lake mining proposal was designated subject to the EA Act.
- . As a result of general concerns regarding land use on and near Shoal Lake, which would not be addressed through the Consolidated Professor project environmental assessment, Ontario agreed to enter into arrangements with Manitoba to conduct a watershed management study of Shoal Lake.
- . MOE agreed to assist the company with the preparation of terms of reference for the preparation of an environmental assessment. The following parties were contacted by the EA Branch and invited to participate in the development of the terms of reference:
  - Ontario Ministry of the Environment;
  - Manitoba Depart of the Environment;
  - Ontario Ministry of Natural Resources;
  - Ontario Ministry of Northern Development and Mines;
  - the Winnipeg Water Protection Group;
  - the City of Winnipeg;



- Shoal Lake First Nations, Bands No. 39 and 40;
- Environment Canada; and
- Fisheries and Oceans Canada.

. The company has been notified that the terms of reference are not legally binding and adherence to the terms will not necessarily assure an approval. During the public review period or at a hearing, any party, including the EA Board, may identify issues which were not addressed in the terms of reference.

. The role of the Federal Government in the EA process and/or at a hearing has been discussed with representatives of the Federal Assessment Review Office (FEARO) and Manitoba government representatives.

#### CURRENT SITUATION:

. The terms of reference have been completed and were forwarded to Consolidated Professor on August 3, 1990.

. The role of the Federal Government in the EA process remains unclear. It is also unclear whether the Federal Environmental Assessment and Review Process (EARP) will be undertaken, and if so, whether the two processes will be managed jointly or independently.

. FEARO has indicated that it is the proponent's responsibility to request that EARP be initiated by Federal Departments.

#### FUTURE ACTION:

. Consolidated Professor is required to prepare and submit an environmental assessment document to the Ministry of the Environment for review and approval. This submission is expected around February 1991.





ISSUE:        North Simcoe Waste Management Association,  
                 Landfill Site 41, Township of Tiny

BACKGROUND:

- .        The North Simcoe Waste Management Association (NSWMA) comprises the Town of Midland, the Town of Penetang, the Township of Tay, and the Villages of Port McNicoll and Victoria Harbour. The Township of Tiny was formerly a member of this group but withdrew from the Association in 1986.
- .        In 1987, the Pautzé Landfill Site, which served all these municipalities, closed by order of the government and these municipalities transported waste from that point to the Keele Valley Landfill site north of Toronto.
- .        In 1988, the Association submitted an environmental assessment for review of a landfill component of their environmental assessment known as Site 41.
- .        Site 41 is located in the southern end of Tiny Township in an agricultural area.
- .        In March 1989, a hearing commenced on the proposed Site 41 landfill site. A decision was rendered by the Environmental Assessment Board on November 17, 1989 against the proponent.
- .        The decision of the Board was appealed by the North Simcoe Waste Management Association to Cabinet, which received depositions from the Association and both the Township of Tiny and the "WHY WYE" Citizens' Group, who appeared in opposition to the application at the hearing.

CURRENT SITUATION:

- .        The decision of the Board was substituted by a Cabinet order stating that:
  1.        The hearing is adjourned to allow the proponent an opportunity to produce further evidence on other areas comparable to Site 41;
  2.        The rating of the agricultural lands component be reconsidered;



3. If a better site is found, an environmental assessment and review and new hearing will be required;
4. Site 41 may once again be the preferred site;
5. If Site 41 is again the preferred site, evidence will be limited to additional hydrogeological and other investigations that provide a rationale for the selection process; and
6. The order applies to the Association or its successors such as the County of Simcoe.

. Along with the order there was a statement explaining some of the concepts that were outlined in the order.

. The Ministry staff have met with representatives of the proponent and discussed preliminary directions that the proponent may take in addressing the requirements and direction provided by the order and the attached statement.

#### FUTURE ACTION:

. The Ministry will be providing a coordinated response on a submission from the proponent.

. The Ministry's response will provide comments and advice on the direction the proponent should be taking in addressing key issues that will be before the Board when the Hearing is reconvened.

. The Hearing is expected to reconvene in the fall/winter of 1990 with participation by the Ministry and other parties expected.

. The Association has been provided with 100% funding for all additional works that are required.

. The intervenor groups including the Township of Tiny have been requesting similar funding considerations.



ISSUE:      Red Squirrel Road Extension

BACKGROUND:

- . On June 12, 1987 the Minister of Natural Resources submitted an environmental assessment (EA) on Primary Access Roads in the Latchford Crown Forest Management Unit. The EA covered both the Red Squirrel road extension and the corridor for the Pinetorch Road.
- . The Red Squirrel road extension was intended to provide primary access to the timber resources in the area south of Lady Evelyn Smoothwater Provincial Park, northward via the Liskeard Lumber Road to the Liskeard Lumber Company mill in Elk Lake and eastward to the Wm. Milne and Sons Ltd. mill in Temagami.
- . Environmentalists and tourist operators had concerns regarding:
  - elimination of one of the last remaining stands of old-growth forest;
  - loss of recreational and tourism potential;
  - cost to the public;
  - impact on ecosystems, habitat, the watershed, fur-bearing populations and the park;
  - increased access by all-terrain vehicles; and
  - encouragement of clear-cut logging.
- . MNR submitted an amendment to the EA to address concerns raised during the Government Review regarding the analysis of economic impacts on tourism and the sawmills, the lack of specific mitigation measures for the Pinetorch Road corridor and the impacts of the roads on the Teme Augama Anishnabai (the Bear Island Band).
- . Notice of completion of the Government Review was issued on March 28, 1988. Two hundred and fifty-eight submissions were received from the public - 173 requested a hearing and 65 recommended against one.
- . On May 17, 1988 the Ministry of the Environment announced acceptance of the EA without requiring a public hearing. Notice of Approval with 29 terms and conditions was signed on June 17, 1988.



- . As a condition of the approval, the Temagami Advisory Council was established to oversee the construction of the Red Squirrel Road and to provide advice to the Ministries of Natural Resources and Environment on matters relating to resource management in the Temagami area.
- . On June 24, 1988 the Temagami Wilderness Society (TWS) applied for a Judicial Review seeking to quash the government's decision to accept the EA and approve the undertaking without a public hearing. An injunction was obtained preventing the MNR from proceeding with activities beyond surveying of the road.
- . On February 27, 1989, the Supreme Court of Ontario (Court of Appeal) found in favour of the Province with respect to the Bear Island Band's claim to approximately 4,000 square miles in the Temiskaming area (encompassing the Temagami area).
- . On April 11, 1989, the Supreme Court of Ontario found that the Ministry had complete authority to approve the undertaking, thus clearing the way for the construction of the road.
- . In early July 1989, MNR began construction of the Red Squirrel Road Extension, starting westwardly at the Liskeard Road, intending to complete construction by December 31, 1989 in accordance with the conditions of approval.
- . On July 14, 1989 the Court of Appeal dismissed the TWS motion for leave to appeal the Supreme Court decision of April 11, 1989.
- . On July 27, 1989 the TWS held a press conference and indicated that they would present a petition to the Government urging a halt to the construction of the road. The TWS also indicated that they would blockade the road if construction continued.
- . On September 18, 1989 protests on the Red Squirrel Road commenced.
- . Prior to that, the Province was unsuccessful in its attempt to obtain an injunction against the protesters (the Court ruled that legal protests cannot be stopped) to prevent them from blockading the road.





- . Several arrests were made against those protesters who were blockading the road illegally (i.e., stopping construction).
- . Despite the blockades, the road was essentially completed by the December 31, 1989 deadline, however, the required mitigation measures were not yet in place.
- . On December 21, 1989, Cabinet approved an exemption order which allowed MNR until July 31, 1990 to complete these activities.
- . In March 1990, MNR presented the Temagami and Latchford Interim Timber Management Plans to the public for review. The plans outlined proposed timber management activities for the period from April 1, 1990 - April 1, 1992, when comprehensive timber management plans would be completed.
- . The Ministry received over 600 requests for a "bump-up" of the Interim Timber Management Plans. These were denied.
- . On April 23, 1990 the Ministers of Natural Resources and Native Affairs announced the signing of a Memorandum of Understanding with the Teme-Augama Anishnabai. The Memorandum of Understanding provides for the establishment of a Stewardship Council, with equal representation from the Band and the Province, to oversee the management of Acadia, Delhi, Shelbourne and Canton townships. This area encompasses the entire Red Squirrel Road extension and most of the Old-Growth forest which was of concern.

#### CURRENT SITUATION:

- . As a result of the MOU which has been signed, and at the request of the Band, MNR did not complete the Red Squirrel Road Extension. Once the Stewardship Council is formed, it will decide on the future of the road extension.
- . The MNR was legally required to complete construction and mitigation measures for the road extension by July 31, 1990. This, however, was against the express wishes of the Band. An exemption order, under the EA Act, allows the Stewardship Council, once it is



formed, to take over the construction and operation of the Road, and removes the requirements of the EA approval from the MNR.

. The Band also would like the Temagami Advisory Council to be relieved of their duties within the four townships in order that the Stewardship Council may take over management of the area. MNR has agreed to this.

FUTURE ACTION:

. MOE proposes to support the Stewardship Council and do whatever is necessary to ensure its implementation and its effectiveness.

. MOE proposes to monitor the Red Squirrel Road situation to ensure that negative environmental impacts do not occur in the area of the road.



ISSUE:      **Shin Ho Pulp and Paper Proposal**

BACKGROUND:

- .      Shin Ho Paper, Korea, in conjunction with Kakabeka Timber (owned 100% by Shin Ho), has proposed to develop a 300 metric tonne per day pulp mill with 70% of the production (market pulp) to go to Korea, and 30% to North America.
- .      There is considerable concern among local residents about the location and possible impact on water quality, air and noise pollution from a new mill. Shin Ho bought property in Rosslyn Village on the outskirts of Thunder Bay. Public opposition to the site has caused them to look for a new location. District Office staff are waiting for Shin Ho to propose a location for the new pulp mill.
- .      Estimated start up cost is \$120 million U.S.

FUTURE ACTION:

- .      MOE staff have met on a number of occasions with the proponents to discuss environmental issues which may be substantial; public reaction may also be strong.
- .      Shin Ho has stated they are committed to best available pollution control technology including secondary treatment.
- .      There is uncertainty as to whether or not a Federal Environmental Assessment will be required.

**NORTHWESTERN REGION**



ISSUE:        **Small Hydro-Electric Generating Facility on Kam River**

BACKGROUND:

- .        The project was designated a major undertaking by MNR and the Environmental Assessment Advisory Committee (EAAC) was requested to conduct an open review. In April 1988, EAAC recommended that the project be subjected to a limited Environmental Assessment which scope would include only the immediate Kam River basin and Hydroelectric sites. The scoped Environmental Assessment regulation and exemption order was approved in May 1988.
- .        A formal document was submitted for government review in March 1989. The review concluded that the Environmental Assessment report was incomplete and did not meet the requirements of the EA Act. Deficiencies in site selection criteria and rationale were noted. The report also did not adequately address recreational concerns.
- .        After the public review was completed, the Environmental Assessment Board was ordered to conduct a full hearing on the small hydro project proposal.

CURRENT SITUATION:

- .        The preliminary hearing, held September 10, 1990, identified the parties and heard their statements.
- .        The deadline for intervenor funding applications is September 25, 1990.

FUTURE ACTION:

- .        If intervenor funding is requested, an intervenor funding hearing will be held October 18, 1990.
- .        On November 30, 1990, the Board will reconvene to hear a motion brought by the Attorney General's Office (AGO), representing the Ministry of Tourism and Recreation. The AGO will argue that the hearing should not proceed until certain legal barriers are addressed.





. The date for the main hearing is set for February 18, 1991. Whether it will proceed is contingent upon the ruling at the November 30th hearing.



ISSUE:      **United Aggregates Ltd. Proposal to Develop a  
Landfill in the Acton Quarry**

BACKGROUND:

- .      In 1987, Reclamation Systems Inc. (RSI) announced a proposal to develop a landfill in the United Aggregates Ltd. (UAL) quarry located south of Acton.
- .      An Environmental Assessment document in support of this proposal was submitted in February of 1989 for formal review.
- .      The Town of Halton Hills and the Niagara Escarpment Commission both oppose the proposal, while the Regional Municipality of Halton feels more research is necessary before a decision can be made.
- .      A public group known as POWER (Protect Our Water and Environmental Resources) was formed in early 1988, in response to the RSI proposal.
- .      The group has been active in its total opposition to a landfill site they believe to be unsuitable and inappropriate, given its location within lands designated by the Niagara Escarpment Commission. They believe that the quarry site should be rehabilitated, once extraction operations have ceased, to as natural a state as possible.

CURRENT SITUATION:

- .      The Government Review of the Environmental Assessment for the RSI proposal is nearing completion.
- .      The Region, Town and POWER have indicated they will request the Ministry to require further research on the proposal, under Section 11 of the Environmental Assessment Act (EA Act).
- .      The requests will be considered in light of the outcome of the Government Review.



# LAND USE PLANNING



ISSUE:        "Greening" of the Land Use Planning Process

CURRENT SITUATION:

- . Protection and enhancement of the environment has not been given adequate consideration in the planning and land development approval process.
- . There are a number of initiatives underway to reform the provincial planning and development approval process and promote a corporate approach to the Province's role in land use planning. Planning reform initiatives also include reforming county government and streamlining the planning and development approvals process.
- . "Greening" of the land use planning process will involve all of the above initiatives. Additional legislative, administrative and policy changes are also being examined. MMA is the lead agency as they administer the Planning Act.
- . MOE has identified a number of principles to guide the "greening" process, including:
  - municipalities must be made more responsible and accountable for their planning decision;
  - environmental protection must be a lead consideration within the planning process;
  - certain environmental features will preclude growth and development; and
  - cumulative developmental impacts (e.g., urban encroachment and the effect on groundwater depletion) must be addressed.
- . An interministerial committee on "greening" the land use planning process has been established which reports to the Deputies at MMA and MOE. This committee is preparing a discussion paper for the Deputies for late fall.
- . MOE "rules" to be set out clearly to guide development and municipalities.

CENTRAL REGION





ISSUE:      Provincial Interest in Land Use - Draft Policy Statement

BACKGROUND:

- . On March 19, 1990 Cabinet endorsed a proposal by the Ministry of Municipal Affairs to develop, in consultation with other Ministries, an "umbrella" policy statement. The policy statement was intended to incorporate the full range of provincial interests in growth and settlement, and resources, as well as the environment into a corporate framework that would address interrelationships and potential conflicts between identified priority interests.
- . The Policy Statement exercise is **working within the existing Planning Act** and is not assuming there will be a "greener" Act.
- . Three staff-level "theme teams" have been preparing policies related to three theme areas: (1) Growth and Settlement, (2) Resources; and (3) the Environment.
- . MMA has made it clear that achieving a streamlined planning process is one of the assumptions underlying this policy statement exercise.
- . MOE produced draft policies on environmental land use compatibility, contaminated site reuse, servicing, and water quality and quantity, which were later revised by MMA to the extent that environmental considerations have been attenuated.

CURRENT SITUATION:

- . The latest draft of the policy statement was reviewed by the Land Use/Water Use (Steering) Committee. References to "minimizing" environmental effects was unacceptable to MOE and would not resolve potential conflicts between growth and environment. As the wording does not reflect the MOE position, there is limited consensus on the policy statement.
- . The current draft policy statement provides limited guidance to municipalities and developers regarding environmental policies and their impact on development.



MOE has a number of suggested revisions to the policies that have been drafted and will continue to work with the committees to ensure environmental concerns are addressed.

APPROVALS BRANCH



ISSUE:        **Niagara Escarpment Program Implementation within  
MOE**

BACKGROUND:

The Ministry of the Environment (MOE) assumed responsibility for the Niagara Escarpment Program and Commission (NEC) on June 1, 1990. MOE staff have worked with staff of the NEC and Ministry of Municipal Affairs (MMA) to transfer program responsibilities and maintain client service functions.

CURRENT SITUATION:

Five Year Review of the Niagara Escarpment Plan

Section 17 of the Niagara Escarpment Planning and Development Act (NEPDA) requires the Plan to be reviewed in five-year cycles. The review follows the formal Plan amendment process set out in the Act. The Five Year Review was initiated by the Minister of the Environment on June 12, 1990. It is being carried out by the NEC at a cost of \$600,000 and is expected to be completed in the Spring of 1992.

Terms of Reference for the review have been recommended by MOE to the NEC outlining issues to be examined during the process. The NEC has added to the Terms of Reference and adopted them.

Issues identified for examination during the review include lot creation policies; mineral extraction; parks and Bruce Trail policies; effects on water quality and quantity; relationship of provincial policy statement to the Plan; commercial uses within the Plan area; minor urban centre boundaries; and adjustments to Plan boundaries.

A total of seven public open houses are planned for the Review, the first being September 13, 1990. MOE will attend all open houses.

Five contract staff are to be hired by the NEC for purposes of completing the Five Year Review.

Ongoing Program Administration

The NEC administers development control, a flexible system of land use regulation within most of the Niagara Escarpment Plan area. A hearing mechanism exists to



deal with appeals of NEC development control decisions. Appeals are heard by the two hearing officers currently operating out of the EA Board although they are not EA Board members.

- MOE is administering the processing of development permit appeals, each of which requires a decision by the Minister. A process has been set up to allow staff analysis of hearing officer decisions and obtain appropriate approvals internally.

- An Interministerial Liaison Committee (IMLC) including the Ministries of Natural Resources, Culture and Communications and Municipal Affairs (ADM-level) has been struck to deal with program issues.

- Program areas that have been identified as requiring attention include:

- changes to the NEPDA to streamline development control and Plan amendment processes;
- environmental monitoring of the Plan;
- program monitoring;
- compliance/enforcement;
- Consolidated Hearings Act (inclusion of NEPDA under CHA);
- parks and Bruce Trail funding; and
- Niagara Escarpment hearing officer affiliation.

#### FUTURE ACTION:

- The Ministry of Natural Resources (MNR) is seeking an advance on existing Niagara Escarpment parks acquisition funds to augment 1990 acquisition accomplishments. Land acquisition is conducted principally by MNR. A MOE decision is required to proceed.

- A full complement of staff within the Niagara Escarpment Unit (Approvals Branch) is expected to be in place by November 1990.

#### APPROVALS BRANCH





ISSUE:      **Wetlands: Proposed Policy Statement**

BACKGROUND:

- . Proposed provincial policy statement under Section 3 of the Planning Act.
- . An Interministerial Committee prepared the policy statement and the implementation guidelines. The Committee is chaired by the Ministry of Natural Resources (MNR) with members from the Ministries of Agriculture and Food (OMAF), Municipal Affairs (MMA) and Environment (MOE).
- . The policy statement is one part of an overall MNR wetland management program. The other components of the program include education, stewardship and the property tax rebate program for conservation lands.
- . The purpose of the policy statement is to provide uniformity and support for the province's approach to wetlands protection. MNR and MMA will be responsible for the joint administration.
- . The MOE mandate in wetlands relates principally to the protection of ground and surface water quality and quantity.

CURRENT SITUATION:

- . Extensive public and government comment on the first draft of the policy statement was received by the Interministerial Committee in 1988-89.
- . A second draft advocated increased protection for wetlands. Specifically, the following changes were made:
  - Northern wetlands are addressed by inclusion of interim criteria pending development of a northern evaluation system;
  - Class III wetlands are classified as provincially significant hence requiring equal protection under the policy statement as Class I and II;
  - A "no development" approach is taken to areas within provincially significant wetlands (previously compatible development was allowed within them). MOE has recently been advised that



MNR may not support this approach in all cases. MNR may want the ability to extract aggregate from beneath the particular wetlands. This matter has not been discussed by the Inter-Ministerial Committee.

- Within provincially significant wetlands complexes (e.g., unit of area composed of two or more wetland areas in close association with each other and possessing similar functions), new land uses may be permitted if they are compatible with the wetland; and
- Only compatible development is permitted on lands adjacent to provincially significant wetlands.

#### FUTURE ACTION:

- . A submission will be made to Cabinet by MNR.
- . MOE has concerns that an umbrella policy statement (currently under development by MMA) may not provide the same degree of protection to wetlands as the second draft of the wetlands policy statement.
- . Any relaxation of measures to protect Classes I, II and III wetlands that have been articulated in the second draft of the wetlands policy statement would be unacceptable to MOE.

APPROVALS BRANCH



ISSUE:      **Ataratiri Affordable Housing Project - Disposal  
of Contaminated Soil**

CURRENT SITUATION:

- .      The City of Toronto is to submit an Environmental Overview Study for approval by the Minister to meet the requirements of the exemption order pursuant to the Environmental Assessment Act.
- .      A decision by the Ministry is required regarding the City's proposed on-site soil management plan. A remediation plan prepared by the City of Toronto recommends on-site management of 443,000 m<sup>3</sup> of marginally contaminated soil and off-site disposal of 225,000 m<sup>3</sup> of soils which have a greater degree of contamination.
- .      The Ministry has not previously accepted large scale on-site management of contaminated soils as is being proposed here.

FUTURE ACTION:

- .      There are two options available to the Ministry: (1) to permit on-site management of the marginally contaminated soil, (2) to pursue the traditional approach, which requires off-site disposal of all contaminated material.
- .      Review and direction by the Minister will be required.

**CENTRAL REGION**



ISSUE:      **The Etobicoke Motel Strip**

CURRENT SITUATION:

The proposed Motel Strip Plan in the City of Etobicoke was requested for designation under the Environmental Assessment Act. In consideration of this request, the Ministry took the position to maintain the option for designation but to permit the land planning process to continue with the additional requirement that an Environmental Management Master Plan be undertaken.

The Minister of Municipal Affairs has declared a Provincial interest in the development of these lands and the Secondary Plan has been referred to the Ontario Municipal Board. A hearing is scheduled to commence on November 19, 1990.

The Royal Commission on the Future of the Toronto Waterfront

The Commission's Second Interim Report - Watershed - was released in August 1990. It contains 80 recommendations.

Seven pages of the report are devoted to the Etobicoke Motel Strip, culminating in recommendations to the effect that:

- the Province should declare the Etobicoke waterfront area and its immediate hinterland an area of Provincial interest under the Planning Act;
- the Province, Metropolitan Toronto and Etobicoke should jointly develop a comprehensive Etobicoke Waterfront Plan and a consolidated waterfront component for the Official Plan; and
- the Province should use the Planning Act to impose a moratorium on development of the Etobicoke waterfront area and its immediate hinterland until completion of a comprehensive Waterfront Plan and an updated Official Plan which conform to the ecosystem approach and principles outlined in the Commission's report.





FUTURE ACTION:

The Ministry, in cooperation with other provincial Ministries, must establish the provincial interest with respect to the Motel Strip area and consider its overall position on this issue in light of the Commission's recommendations.



ISSUE:      Development Pressures in Central Region

CURRENT SITUATION:

- . In the Central Region context, rural areas can be found within the boundaries as well as outside of the boundaries of the Greater Toronto Area (GTA). The main issue confronting Central Region in these rural areas is servicing, as a result of strong growth pressures.
- . Those areas which have municipal services are experiencing difficulties due to the increasing demands of the growing population, for water and sewage treatment. Municipal water supplies are generally obtained from the groundwater, and there is some evidence of contamination of available aquifers which is causing supply problems.
- . Groundwater availability for municipal water supplies is becoming a pressing issue. The influence of pumping at the Aurora-Newmarket, Town of East Gwillimbury and the Bradford wells is overlapping, and the demand for additional water supplies to service the expanding population may create conflicting interests between these municipalities and other existing and future private uses (e.g. golf course irrigation).
- . There is concern that withdrawals from the aquifer are exceeding recharge rates, resulting in a continual depletion of water storage within the aquifer system. Management of this finite resource is hampered by insufficient knowledge on its extent and recharge capabilities.
- . The interrelationship between ground water extraction and resultant depletion of baseflow in salmonoid or cold water streams has become a major issue with respect to the development of several municipal wells in Halton Hills (Georgetown) and in Caledon Township. In both instances, large capacity wells, located near cold water or salmonoid streams are being developed to serve urban growth. MNR has expressed concerns in both instances.
- . Specific policy issues for Central Region include:
  - Control of Growth and Settlement to mitigate and avoid the excessive pressures on land and water use in the region.
  - A current MMA policy initiative is under development in consultation with other Ministries.



When completed, this "umbrella" policy will define priority provincial interests in land use planning.

- The Office of the GTA has released a report for consultation, which highlights a number of options for possible growth scenarios. These options propose to guide development in an environmentally- and economically-sound manner.
- Groundwater management program to ensure adequate quantity and high quality water for all uses within the region is under development within the Ministry and will incorporate the "responsible use" concept for groundwater protection, as identified in existing Ministry policy.
- Requirement for better integration of ground- and surface water management with land use planning.
- Requirement for better integration of environmental and human health considerations in the land use planning and approval process.
- Protection of areas of priority provincial interest (e.g., Oak Ridges Moraine).
- Requirement to address the cumulative impact of growth and development over space and time (e.g., urban encroachment/expansion and depletion of groundwater sources). The existing planning framework does not address this issue adequately.
- Numerous proposals have been directed to Central Region for the development of extremely contaminated lands. This has generated demands and pressures for the approvals process.



ISSUE:      **Decommissioning/Site Clean-ups**

CURRENT SITUATION:

- .      Decommissioning is a term used to mean the partial or complete closure of a facility. Clean-up means the restoration of a contaminated site to ensure the protection of human health and the environment. The decommissioning of facilities may or may not be associated with site clean-up.
- .      There are numerous proposals for decommissioning of formal industrial sites within the province. Many sites involve huge quantities (up to one million cubic metres) of contaminated and potentially-contaminated soil (e.g., Marathon lands, Canron lands and the Ataratiri project) that will require removal for off-site treatment and/or disposal.
- .      In principle, remedial action should be undertaken where the levels of contaminants are found to exceed ambient background levels. However, in certain situations background levels of particular contaminants may be unacceptably elevated in the local area as a result of industrial or other activity.
- .      In such cases, the clean-up criteria for the site should be developed to ensure the protection of human health and the environment and should consider the future land-use options of the site. Generally, more stringent clean-up criteria will be required for agricultural, residential and parkland re-development than for commercial or industrial re-development.
- .      The disposal of contaminated soil and other sediments is one of the key limiting factors for clean-up of contaminated sites. The lack of appropriate disposal sites for contaminated sediments has resulted in the on-site management of contaminated materials to the greatest extent possible.
- .      Consequently several proposals for on-site management of contaminated materials (e.g., stabilization of soil, confinement of contaminated areas, treatment of soil on-site) are being directed to the Ministry for approval a Certificate of Approval under Part V of the Environmental Protection Act.
- .      A decommissioning policy and guidelines have been developed by the Ministry to address the decommissioning and clean-up of sites in Ontario and to ensure that the





decommissioning is completed within an environmentally-acceptable manner which incorporates public participation within the decision-making process.

In many cases, the economic, legal and practical implications of decommissioning are substantial and have generated excessive demands and pressures for proponents and the Ministry.

A number of problems with Decommissioning/Site Clean-ups are summarized below:

- MOE currently has no regulatory control over contamination at re-development sites; rather, it exercises control through land use review for municipalities or the Ministry of Municipal Affairs, usually without the necessary guidance in applying appropriate controls to protect human and environmental health.
- Current decommissioning guidelines recommend clean-up to background; however, most clean-ups are to the effects-based guideline numbers which do not address groundwater concerns or specify depth of clean-up.
- Current decommissioning guidelines allow on-site management of the contaminated material only if approval is received under Part V, (EPA), with possible public hearing requirements as well as other approvals (e.g., Section 8 Air).
- MOE has 19 different guidelines for handling and disposal of materials which has resulted in errors, confusion, and inconsistent application of guidelines.
- Under existing regulations there are only two categories of materials: inert fill and waste. The current definition of inert fill is so restrictive that **virtually all fill is legally considered a waste** and must be disposed of in rapidly-disappearing landfill sites.
- Tipping fees, which have rapidly increased, and capacity problems at certified waste disposal sites make disposal at these facilities increasingly unattractive and in many cases prohibitively costly.



- MOE Regions are faced with approving applications and providing advice based on unclear requirements and often conflicting guidelines, or non-existent guidelines.

The Materials Policy Committee (MPC) was instructed in January 1990 to develop an overview policy for materials management. In July 1990, the MPC submitted a "Proposal for Developing a Classification Policy for Materials Management" to the Policy Development and Coordination Committee for review.



# WATER AND SEWAGE INFRASTRUCTURE



ISSUE:      **Water and Sewage Program**

1.    TYPES OF GRANT PROGRAMS:

Up-Front Grants:

(I)   Up-Front Grants:   Municipal Projects-Regular

- .      provided to local governments for the construction of communal water and sewage works.
- .      maximum grant of 85% for communities of 1,000 or less, to a minimum of 15% for communities of 7,500 or more, larger municipalities could receive a grant of 33 1/3% if the construction is for environmental reasons rather than growth.

(II)   Beaches Restoration

- .      improve recreation water quality in the province.
- .      minimum grant of 33 1/3% for municipalities with 7,500 or more people, smaller municipalities can receive up to 85%.

(III)   Regional Priorities

- .      funded by Ministry of Northern Development.
- .      special top-up grant, averaging 7.5% of total project cost to priority water and sewage projects in Northern Ontario.

(IV)   Infrastructure Planning and Rehabilitation  
(Lifelines)

- .      examine the condition of water distribution and sewage collection systems.
- .      grant for repair, rehabilitation or replacement of existing infrastructure:

(i)   Planning Studies

- .      50% grant for municipalities with population of 7,500 or more.





- maximum grant of 85% when population is less than 1,000.

(ii) Infrastructure Rehabilitation

- grant of 33 1/3% regardless of population.

(V) Provincial Projects

- MOE contracts to construct certain water and sewage works.
- Projects are primarily area schemes that serve more than one municipality.

Disbursements:

(VI) Investments in Water Treatment and Waste Control Facilities

- portion of costs for area scheme projects that is not forgiven.
- costs are recovered over 30 years.
- assistance level usually 15%; central agency approval is required for anything above 15%.

B. BUDGET REQUIREMENTS (\$ MILLIONS):

	<u>90-91</u>	<u>91-92</u>	<u>92-93</u>	<u>93-94</u>	<u>94-95</u>
Municipal Projects - Regular	110.0	200.0	166.0	194.0	226.0
Beaches Restoration	30.0	30.0	30.0	40.0	40.0
Infrastructure Planning	3.0	6.0	5.0	4.0	3.0
Infrastructure Rehabilitation	12.0	23.0	30.0	30.0	30.0
Provincial Projects	17.1	34.0	29.0	28.0	29.0
Investment in Water Treatment and Waste Control Facilities	<u>71.4</u>	<u>90.0</u>	<u>61.0</u>	<u>57.0</u>	<u>64.0</u>
	<u>243.5</u>	<u>383.0</u>	<u>321.0</u>	<u>353.0</u>	<u>392.0</u>

C. FINANCING ARRANGEMENTS:

(I) Provincial Projects

- Seventy-three water and 152 sewage projects that are owned and operated by MOE and service



municipalities throughout Ontario are notified by December 1 of each year of the subsequent year's service rates/changes.

The service rates/charges are set on the basis of deferring a portion of the current costs (operating expenses and debt charges) in the deficit account for recovery in future years. This practice, called deficit financing, starts with low services charges to reflect the reality of slow connection in the existing service areas. This is then followed by increasing charges and phasing-in of cost recovery as growth occurs.

The benchmark for affordability of service charges is the Typical Homeowner Cost (THC). THC is calculated by deducting non-domestic revenue from MOE's service charges and then dividing by the number of households being served within a particular municipality.

The Province may have to consider additional financial assistance for projects with 1991 THC exceeding \$381 (\$363 for 1990 plus an inflation factor) or with service charge increases greater than 10% as determined by the current review.

## (II) Municipal Projects

The 291 water and 307 sewage systems are notified by Precept by February 15 of each year of the subsequent year's revenue requirements.

MOE recovers the following from the municipalities serviced by these systems: operating expenses, debt on a straight-line basis and reserve account for contingencies.

### FUTURE ACTION:

Proposed formation of Crown Corporation requires consideration of existing grant policies. Whether it proceeds or not, the fact remains that funding demands outstrip funds available and the situation will worsen



as MISA, RAPs and other programs are implemented.  
Additional grants are required or new funding options  
should be considered.

PROJECT ENGINEERING BRANCH



ISSUE: Lifelines Infrastructure Renewal Program

BACKGROUND:

- . Municipalities throughout Ontario receive grants from the Ministry of the Environment for Needs Studies and rehabilitation of their water distribution and/or sewage collection systems.
- . These studies identify the deficiencies within the water collection and distribution system and propose cost-effective solutions to bring the system back to its original efficiency.
- . Funding assistance is also available for the rehabilitation of watermains and sewers to correct the deficiencies identified in the Needs Study.

CURRENT SITUATION:

- . There are presently 287 approved Needs Studies under way and more are being approved every month.
- . Approximately 105 Needs Studies have been completed to date proposing health, environmental and cost savings to water and sewer systems in various municipalities throughout Ontario. A total of over \$42 million worth of Needs Studies have been initiated of which the Ministry will contribute over \$22 million.
- . A total of \$116 million worth of construction has been approved for funding of which MOE will contribute \$35 million.
- . A total of \$12 million worth of construction has not been approved because there are insufficient funds in the 1990-91 fiscal year. A number of municipalities have expressed disappointment in not getting funding for their projects.
- . The budget for Lifelines in fiscal year 1990-91 is \$15 million; \$5 million for Needs Studies and \$10 million for construction.





FUTURE ACTION:

Indications are that construction grant requests will be greater for 1991-92 fiscal year than 1990-91. The budget request for Lifelines in fiscal year 1991-92 is \$29 million.

PROJECT ENGINEERING BRANCH



ISSUE:      Service Rates/Charges - Review for 1991

BACKGROUND:

- . Two hundred and twenty-five water and sewage works facilities are owned and operated by the Province.
- . These facilities were mostly built in the late 1960's and 1970's and sized to meet expected future growth.
- . Provincial assistance of up to 75% of capital costs was originally provided, based on maximum 1972 typical homeowner costs (THC's) of \$110 for water and \$130 for sewage.
- . The service rates/charges are set on the basis of deferring a portion of the current costs in the deficit account for recovery in future years. The practice, called deficit financing, starts with low service charges to reflect the reality of slow connection in the existing service areas. This is then followed by increasing charges and phasing-in of cost recovery as growth occurs.
- . Oversized projects with excessive debt and accumulated deficit accounts were given additional financial assistance under the 1985 Ontario Budget Provision. Debt and deficit accounts were written off to limit 1986 typical homeowner costs to a maximum of \$300 or to an increase of 10%.
- . Projects with 1988 THC's in excess of \$330 or increases greater than 10% received provincial assistance. Projects with 1989 THC's in excess of \$346 or increases greater than 10% were also assisted.

CURRENT SITUATION:

- . The 1991 service rates/charges for all Provincial water and sewage projects are currently being reviewed.
- . The Provincial projects along with Ministry staff that calculate the services rates/charges will be transferred to the proposed Ontario Water and Sewage Services Corporation.
- . At the present time, it has been decided not to include MISA costs in the 1991 rate calculations.



. The Province may have to consider additional financial assistance for projects with 1991 typical homeowner costs exceeding \$381 (\$363 for 1990 plus an inflation factor) or with increases greater than 10% as determined by the current rate review.

FINANCIAL AND CAPITAL MANAGEMENT BRANCH



ISSUE:      Township of North Plantagenet Funding

BACKGROUND:

- .      A communal sewage system was built in this community which is situated along the bank of the Ottawa River.
- .      From 1986, when the Rotating Biological Contractor (RBC) unit was designed, MOE staff revised the effluent criteria for the plant in anticipation of Municipal Industrial Strategy for Abatement (MISA) regulations. The revised criteria required a much more complex treatment process to complement the RBC unit.
- .      In 1987, two contracts were awarded: one for the treatment plant effluent outfall into the Ottawa River and the other for gravity sewers. The contracts were awarded in the approximate amount of \$1.5 million.
- .      Subsequent to the awarding of the sewers contracts, the treatment plant and pumping station were advertised. Costs appeared extraordinary high and the works were re-tendered without any significant decrease in cost.
- .      The project approved in 1987 with an estimated cost of \$3.77 million has been finalized at a cost of \$7.00 million. Typical Home Charges (THC) have risen from the \$460.56 pa calculated in 1987 to \$951.52 pa advertised today.

CURRENT SITUATION:

- .      There is considerable concern by the residents of Wendover regarding the charges presently required to pay off the municipality's capital debt and the operating costs.
- .      The municipality requested a special grant to alleviate at least a portion of the escalated costs since the Ministry required the RBC unit to be installed in order to evaluate its performance and in view of the anticipated more stringent MISA regulations for effluent quality.
- .      Ministry of Municipal Affairs reviewed the municipality's ability to fund its portion of the project, and found that it could do so if it raised monies through a general mill levy.





. The Town Council has refused to charge anyone for the Wendover project that does not own property within its serviced area.

FUTURE ACTION:

. The Ministry is reviewing the Wendover Council request to provide the municipality with a special \$0.5 million grant to help offset their costs. A Management Board submission is being prepared for senior management approval.

PROJECT ENGINEERING BRANCH



ISSUE:       Lambton/North Kent Area Water Supply

BACKGROUND:

- .       The Town of Dresden draws water from the Sydenham River which shows a presence of herbicides, pesticides, phenols and nitrates, occasionally in excess of the Ontario Drinking Water Objectives. Upgrading of the treatment plant is not considered feasible.
- .       The Town of Wallaceburg and Walpole Island draw water from the St. Clair River, which is subject to accidental spills.
- .       The municipalities are concerned about the suitability of both rivers as sources of drinking water and requested that the Ministry of the Environment (MOE) consider an alternate source of supply. The MOE agreed to fund a feasibility study.
- .       Through the Environmental Assessment (EA) process, which included public participation, an option to develop a water supply system from West Lambton (Lake Huron source) was selected.
- .       The MOE has committed 75% of funding, excluding the cost of servicing Walpole Island. Environment Canada has refused to provide funding for infrastructure.

CURRENT SITUATION:

- .       A draft Environmental Study Report (ESR) has been placed for public review. Preliminary financial analysis has been carried out based upon re-financing of the secondary rates for Sombra and Moore Townships on the West Lambton system, and a uniform rate for North Kent municipalities. At the request of the municipalities, a rate based upon distributed costs was also examined.
- .       The ESR is based upon development of a provincial area water supply system with the Crown as the proponent. Union Gas has recently proposed a private utility proposal to transport potable water from Point Edward to the North Kent area and recover the cost through a user rate. The status of this latter proposal is not clear, and questions cannot be fully answered pending the proposed Crown Corporation formation.
- .       The Townships of Dawn and Euphemia have recently approved the Township of Sombra for a water supply.



This situation will be handled through the EA process and may require an amendment to the ESR.

- . The current estimated cost in 1990 dollars is \$43.7 million.

FUTURE ACTION:

- . Is is proposed to finalize the ESR and the municipalities will have to decide whether to enter into an agreement with the Crown or proceed with Union Gas as the proponent.
- . Further development of the area water works will require a consolidated hearing to consider Ontario Municipal Board requirements and approval to sell water outside a public water service area.



ISSUE:        South Peel Sewage and Water Facilities - Transfer  
                 of Operating Responsibility to the Regional  
                 Municipality of Peel

BACKGROUND:

- .        On December 17, 1968 the OWRC entered into water and sewage service agreements, which included the acquisition of major works, with Mississauga, Port Credit, Streetsville, Brampton and Chinguacousy Township. A similar agreement was entered into with Metro Toronto to provide sewage service for a small area in West Toronto from this system.
- .        In 1974 the Regional Municipality of Peel was created.
- .        Currently, the Ministry is operating the water and sewage works under the terms of the 1968 agreements. Operating costs and debt charges are paid by the Region of Peel on a pay-as-you-go basis.

CURRENT SITUATION:

- .        Currently, the Ministry is incurring costs of \$20.7 million to operate the sewage/water facilities.
- .        The existing service agreements provide for perpetual operation by the Ministry and the proposed transfer of operations will require Peel's consent to terminate the existing agreements.
- .        At present, there are 167 plant employees and 16 supervisory staff employed at the water/sewage facilities.

FUTURE ACTION:

- .        The possibility of transferring the operating responsibility to the Region will have to be considered by the Ministry or the proposed Ontario Water and Sewage Services Corporation.





COMMENTS:

. If the operating responsibilities are transferred to the Regional Municipality:

- (a) A total of \$20.7 million could be eliminated from the budget.
- (b) The plant employees would be transferred to the Region and would be subject to the Successor Right's Legislation, i.e., the OPSEU Collective Agreement applies until the Labour Relations Board determines otherwise.
- (c) There is no similar protection for Management Employees.
- (d) Superannuation Adjustment Fund contributions would have to be refunded.

. The Region rejected a transfer proposal in 1983 and it is unlikely they will accept such a proposal in the future. At the time, the Region requested financial compensation in the order of \$13 million.



ISSUE:        Township of Ignace Request for financial assistance to reduce accumulated debt on the previously provincially-owned sewage facilities

BACKGROUND:

- .     An extended aeration sewage treatment plant, pumping stations, forcemains and collection system was built by the Province under the Provincial deficit financing scheme in 1972 to serve the Township of Ignace.
- .     The Ministry provided 47.6% Provincial assistance on the gross capital cost of \$813,508.
- .     The Township had appealed the Ministry's service rates in 1978. This appeal was resolved to the satisfaction of the Township. At that time, the sewage system had an accumulated deficit of \$95,236 which was known to the Township.
- .     The project was refinanced in 1984 and the ownership of the works was transferred to the Township.
- .     Along with the outstanding capital obligation, a deficit of \$315,000 was also refinanced and assumed by the Township in 1984.

CURRENT SITUATION:

- .     Recently, the Township has claimed that the original design for the sewage works was for 40 years though it was known that mines in the area would only operate for 20 years.
- .     In recent years, the Township has experienced some decline in its population due to one mine closure and it claims that it is facing an uncertain economic future.
- .     To reduce the sewage debt, the Township has recently requested the Ministry, through the Premier's Office, to accept a payment of \$84,379 and forgive interest charges in the amount of \$104,000.
- .     A similar proposal was made by the Township in the past but received no support from the Ministry, mainly due to the fact that the deficit financing scheme allowed the municipality to obtain much needed infrastructure for water and sewage systems without being burdened by the cost of full financing from year one. The scheme also provided for partial payment of operating and debt



financing costs in the earlier years with the shortfall deferred for payment in later years, thus making the facilities affordable at the time.

FUTURE ACTION:

- . A response for the Premier is being prepared for senior management review.



ISSUE:        **Mandatory Certification of Water and Wastewater Operators and Facilities**

BACKGROUND:

- .     In February 1987, the Ontario Water and Wastewater Utility Operators Certification Program was initiated.
- .     The Certification Program was designed to protect the environment by ensuring that the skills and knowledge of the operators are equal to the technical requirements of the facility for which they are directly responsible.
- .     The Certification Program involves more than 2,200 utilities and 10,000 operator certifications. It is envisaged that when the program becomes mandatory, an average of 2,000 examinations per year will have to be administered; and 3,000 operators will have to be certified and/or re-certified per year.
- .     The Ministry proposed a series of interim measures in February 1990 to clarify the expectations of the Ministry with respect to Certification and prepare for the implementation of a mandatory program under the authority of a regulation.
- .     These measures were the following:
  - a new target date for promulgating the regulation of October 1, 1990;
  - extension of the period of issuance of "restricted certification" to October 1, 1990; and
  - a re-affirmation of October 1, 1991 as the date when certified operators must be in place for municipal water and wastewater utilities only.
  - Extension of the mandate of the Interim Board of Certification to the date of promulgation of the regulation.
  - Negotiation of a partnership within the structure of the community college system which would take over the Certification staff and administer the business of the office.
  - Transfer administration of the program to the chosen community college.





CURRENT SITUATION:

- . The regulation has been drafted and is being reviewed by the Ministry. No completion date is projected.
- . The target date of promulgation of October 1, 1990 will not be met and no new date can be set at this time.

FUTURE ACTION:

- . Legal review of the regulation and Management Board/Legislative Council approval are required.
- . The Ministry will set up a new certification board administrative structure.
- . The Ministry may propose new people to be appointed to the proposed Board by the Minister.



## OTHER CORPORATE ISSUES



ISSUE:        Canadian Environmental Protection Act (CEPA)

BACKGROUND:

The Canadian Environmental Protection Act received Royal Assent on June 28, 1989. The purpose of the Act is to control hazardous substances from the "cradle to the grave".

CURRENT SITUATION:

The Act provides the following means for Federal-Provincial cooperation in the development and enforcement of regulations:

- Equivalency agreements: where the Federal Government grants a province the authority to administer provincial regulations which are equivalent to the terms of Federal regulation;
- Administrative agreements: to enable the Federal and Provincial governments to reach working arrangements for the administration of Federal regulations in a province; and
- Federal-Provincial Advisory Committee: to advise the Federal Minister on regulations, standards and other proposals associated with CEPA.

The issues for the provinces are:

- Federal intervention in Provincial jurisdiction;
- Equivalency: Provincial concern about conditions proposed by Environment Canada for meshing Provincial laws with the new Act;
- Interim orders: the need to ensure that Federal-Provincial consultation occurs at an early stage in the development of interim orders; and
- Resources: the Federal government would not be able to administer ambitious regulatory programs on its own in the short term; Provinces are seeking Federal assistance to administer agreements.

The Canadian Council of Ministers of the Environment have requested the Deputy Ministers to develop ground rules for meshing provincial legislation governing the control of hazardous substances with CEPA.



. The Ministry supports the need for national action to control hazardous substances and is willing to develop a partnership with Environment Canada to achieve this end as long as Ontario can adopt standards equivalent to or stronger than the national level.

#### FUTURE ACTION:

. Ministry staff are developing a position paper on the merging of Federal and Provincial regulatory plans to control effluents into water from pulp and paper plants. A similar paper will be developed on the storage of waste PCBs.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS





ISSUE: Canadian Council of Ministers of the Environment (CCME) as a forum for the discussion of Federal-Provincial Matters

BACKGROUND:

- . The Council is undergoing a major restructuring. This is being done to address more effectively the large number of environmental issues facing governments across the country. The organization is being streamlined to allow governments to respond more quickly to emerging issues, set priorities and to plan over the longer term. The new structure is expected to be in place by March 1991.
- . The Council meets twice each year to provide direction for work to be carried out under its auspices. Additional meetings are held when special needs arise. A Committee of Deputy Ministers reports to the Council and provides policy guidance to CCME projects. A full-time Secretariat (based in Winnipeg) provides technical, policy and administrative support.

CURRENT SITUATION:

- . The Council has met twice already this year, and the third meeting is scheduled to be held in Victoria B.C. at the end of November, 1990.
- . Topics discussed at the two meetings in March and August include:
  - Global Warming
  - Interjurisdictional Cooperation
  - National Packaging Protocol
  - Regulation Strategy for the Pulp and Paper Industry
  - National Program for the Clean-up of Contaminated Sites
  - Used Tire Management
  - PCB Disposal Strategy
  - Federal Environmental Assessment Legislation
  - Federal Green Plan
- . Ministry staff are actively involved in committee or task group activities associated with all of the above subjects.



#### FUTURE ACTION:

- . As part of the restructuring program, Deputy Ministers have prepared a list of proposed CCME priorities for 1991-92 to be discussed with individual Ministers.
- . Tentatively, there are five priority issues:
  - Climate Change (including NOX/VOC, CO<sub>2</sub>, Ozone and CFCs)
  - Interjurisdictional cooperation (Green Plan, Canadian Environmental Protection Act, Canadian Environmental Assessment Act)
  - Solid Waste Management/Packaging
  - Hazardous Waste/Toxic Waste
  - Public Consultation
- . Two other important items include:
  - State of the Environment Reporting
  - Economic Instruments
- . The agenda for the meeting in November is expected to focus on the following substantive issues:
  - Interjurisdictional cooperation on such matters as the Green Plan and Environmental Assessment;
  - Atmospheric effects, including National Action Strategy on Climate Change, NOX/VOC Management Plan, elimination of CFCs and transboundary air negotiations with the U.S.; and
  - Waste Management, including the National Packaging Protocol, clean-up of contaminated sites and used tires.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS



ISSUE:      **The Green Plan**

BACKGROUND:

- .     A discussion paper (Framework for Discussion on the Environment) was released by the Federal Government on March 29, 1990. Information and consultation sessions were held across Canada to explain the Green Plan process and timetable. Public reaction was generally negative.
- .     Environment Canada released a report that is essentially a digest of the recommendations and concerns of participants in the consultation sessions. The report contains suggestions for further consideration (353 items). These are described as possible policy, program and legislative elements of the Green Plan.
- .     However, the sheer number of suggestions is beyond the capacity of the Government to finance and the final Green Plan will contain a much smaller set of actions.
- .     A national wrap-up consultation session was held in Ottawa on August 20-21, 1990 and was followed by a CCME Ministers' special meeting at which the Green Plan was the main agenda item.
- .     The Federal Minister of Environment (Mr. de Cotret) indicated he would keep the Provincial Ministers fully informed, and he was prepared to meet again before the Green Plan was finalized.
- .     Mr. de Cotret announced that he wished to take the Green Plan to Policies and Priorities Committee on September 18, and publicly release the plan in November 1990.

CURRENT SITUATION:

- .     Detailed comment at this time on the Green Plan is precluded by:
  - the lack of specificity in the Federal Discussion Paper (March 1990);
  - the generally unfocussed nature of the consultation sessions; and
  - the lack of prioritization of recommendations presented in the Synthesis Document.



. Inter-ministerial discussions have produced the following:

- Strong emphasis is placed on new R & D education and awareness programs as opposed to recommendations for more direct action. Application of good science in addition to funding of more science should be stressed.
- Specifics on levels and distribution of funds for recommended activities are not provided.
- There is minimal coverage of innovative economic instruments which could assist private sector acceptance of environmental programs (and their associated costs).
- Little attention is given to furtherance of Federal-Provincial relationships, yet strong recommendations (application of national standards under CEPA; regulation of the biotechnology industry; Drinking Water Safety Act) would require significant intergovernmental cooperation.

#### FUTURE ACTION:

- . Further opportunities may be presented for additional provincial input to the Green Plan exercise.
- . Interministerial dialogue is continuing to identify potential Green Plan elements that are of highest priority to the province and to distinguish between areas of federal and provincial responsibility.
- . The Ministry is urging the Federal Government to produce a strategy with more emphasis on direct action and close interjurisdictional collaboration.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS





ISSUE:      Environment Canada Seeks Ontario Participation in  
a Canada-U.S.A. Pollution Prevention Strategy

BACKGROUND:

- .     The U.S. EPA has seized upon pollution prevention as a philosophical alternative to sustainable development. The two concepts have much in common but it is preferable to consider pollution prevention as a component or element of sustainable development.
- .     A high level EPA Advisory Committee has been formed to deal with the issue. The Great Lakes basin has been targeted as the prime focus of the U.S. effort.
- .     Environment Canada has agreed to the development of a bi-national pollution prevention strategy. A strategy paper is to be finalized by October 31, 1990.
- .     The U.S. Great Lakes States are cautiously supportive of the EPA initiatives.

CURRENT SITUATION:

- .     Environment Canada wishes to have Ontario's support and is seeking ideas with respect to possible demonstration projects aimed at pollution prevention. Environment Canada cannot give assurances or any real indication of possible funding levels because of uncertainties related to the Federal Green Plan.
- .     Environment Canada and EPA are looking at four possible demonstration projects:
  1.     International Conference on Pollution Prevention (jointly hosted by U.S. and Canada with significant private sector participation).
  2.     Establishment of Pollution Prevention Centres (e.g., Hamilton and Buffalo) to channel research funding.
  3.     An EPA project possibly involving the automotive industry.
  4.     A suggestion involving the pulp and paper industry.
- .     The Ministry has been approached regarding a possible demonstration project in the Lake Superior basin



involving pulp and paper milling operations. Lake Superior has been suggested because the bulk of contaminants in this lake are from Ontario and because the IJC recently recommended enhanced environmental protection measures for this water body.

- . Environment Canada wishes to take a broad multi-stakeholder approach to the pollution prevention issue and would like to involve the Round Tables on Environment and the Economy (National and Ontario).

#### FUTURE ACTION:

- . The Canada-Ontario Agreement (COA) Board of Review will receive a briefing from Environment Canada on pollution prevention at its October meeting.
- . The Ministry will review the pollution prevention strategy when more information becomes available and commitments will be discussed when the financial implications become apparent.

#### INTERGOVERNMENTAL RELATIONS AND STRATEGIC PROJECTS



ISSUE:        **Biotechnology and the Regulatory Role of the  
Ministry of the Environment**

BACKGROUND:

- .     Biotechnology can be defined as the application of living organisms or their by-products for the production of goods and services. Applications of biotechnology can be expected in all industry sectors in Ontario, and is expected to represent a significant area of economic growth in the coming decades.
- .     Concerns associated with biotechnology have centred on the potential risks to human health and the environment which might be associated with the environmental introduction of novel, genetically engineered organisms.
- .     Regulatory control for biotechnology should ensure that human health and the environment are protected from the potential risks associated with biotechnology.
- .     In 1989, an Inter-Ministerial Committee on Biotechnology, with representation from the Ministries of Labour, Environment, Health, Agriculture and Food, Treasury and Economics, Industry, Trade and Technology, and Natural Resources published a Green Paper on biotechnology which was used to solicit public comment prior to the formation of policy initiatives.
- .     In early 1990, the Ministry established a Biotechnology Unit within the Hazardous Contaminants Coordination Branch (HCCB) in order to provide in-house expertise and to develop regulatory strategies the Ministry might pursue to address environmental concerns surrounding biotechnology.
- .     At the Federal level, Agriculture Canada and Environment Canada are the two agencies responsible for regulating biotechnology products intended for environmental application. Agriculture Canada intends to regulate the products of biotechnology under the purview of existing legislation. The guidelines which will be used for the assessment of these products are under development.
- .     Environment Canada will regulate all products of biotechnology not addressed by other federal legislation under the authority of the Canadian Environmental Protection Act (CEPA). The CEPA regulations dealing



with biotechnology are currently being drafted and are expected to be released for public comment shortly. The Province of Ontario will have the same opportunity as other stakeholders for commenting on the adequacy of the these regulations.

- . The particular role that provincial governments might play in regulating biotechnology has not been discussed at the national level.

#### CURRENT SITUATION:

- . The federal regulatory framework for biotechnology is currently under development. The regulation of biotechnology will address both emissions/discharges/waste treatment during manufacturing, as well as the assessment of products intended for deliberate environmental introduction. The division of jurisdictional authority covering these areas of regulatory control have not been formally addressed.

- . The particular role that the Ministry of the Environment might play in the regulation of biotechnology, and how it relates to the federal regulatory system is currently under discussion. One potential area of regulatory involvement is the control of emissions, wastes and spills originating from research and manufacturing facilities, an area which falls within the legislative mandate of the Ministry. Regulatory control may also involve assessing the risks which may be associated with a particular product of biotechnology prior to its application and use in the environment, an area which falls outside of the traditional legislative mandate of the Ministry. The Provincial pesticides legislation provides an appropriate framework for addressing pesticides produced through the application of biotechnology.

#### FUTURE ACTION:

- . The impending release of federal regulations and guidelines will necessitate that the Ministry formulate a position on the adequacy of federal regulations at addressing provincial concerns in the area of biotechnology.

- . Options will be brought forward for consideration.





. The Ministry will have continued involvement with the Inter-Ministerial Committee on Biotechnology in developing a provincial policy to address biotechnology.



ISSUE:        Ontario Round Table on Environment and Economy -  
                 Strategy Development

BACKGROUND:

- .     The Ontario Round Table on Environment and Economy was established by the Premier to further the dialogue and understanding throughout the Province on sustainable development - a philosophy promoted by the Brundtland Commission to better balance the needs of present and future generations.
- .     The Round Table is comprised of various government, business, academe, non-government organizations, labour, agriculture and native peoples representatives.

CURRENT SITUATION:

- .     The Round Table has initiated a strategy development process as described in its Challenge Paper of July 27, 1990.

FUTURE ACTION:

- .     The Round Table will proceed with the strategy development process as follows:
  - undertake public and stakeholder consultation (September to December);
  - establish Task Forces (September) for various industry sectors;
  - undertake research (September) relating to the strategy and to the Round Table's principles;
  - meet with stakeholders and the general public (January to March 1991);
  - task forces report to Round Table (late Spring 1991);



- a draft strategy, consolidation of all results and reports of Sector Task Forces, public consultation and research will be completed by the summer of 1991; and
- the draft strategy will be presented to the Premier (Spring 1992).

ONTARIO ROUND TABLE ON  
ENVIRONMENT AND ECONOMY



ISSUE: Outstanding policy and operational issues with financial implications

BACKGROUND:

- . A number of Ministry programs exist that have been developed, and in some cases have been announced and released for public consultation but which have not yet received approval for implementation. There are also a number of internal operating pressures which have arisen in-year and need to be addressed.
- . The programs have urgent policy issues and outstanding resource requirements that have not been resolved. Resolution of these issues will be required in the near future.

CURRENT SITUATION:

- . The following list outlines critical areas where pressures exist:

<u>PROGRAM</u>	1990-91 <u>(\$000's)</u>
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Environmental Clean-ups

Clean-up of the Hagersville tire fire site including a new water pollution control plant and \$350,000 in overtime salaries.	8,750.0
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The MOE will be taking measures to secure some of the tire sites in Ontario that are out of compliance with fire code regulations. Efforts will be made to recover these costs from the tire site owners.	1,900.0
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Incineration of PCBs at Smithville. The Ministry has made a commitment to proceed with this initiative.	12,900.0
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Clean Air Program

The Clean Air Program (CAP) involves amendment to Regulation 308 under the Environmental Protection Act (EPA) to classify air contaminants and regulate control requirements based on emission





1990-91  
(\$000's)

toxicity. A draft regulation was released for a six month comment period in August 1990. Review of public comments is scheduled to follow in early 1991.

The program is expected to require 311 new staff and \$30.0 million if it proceeds as planned.

Of the resources required for the program, five staff and associated DOE are needed immediately in Air Resources Branch for public consultation.

275.0\*

Also, an additional 10 Air Resources Branch staff and associated DOE are required urgently to develop outstanding issues fundamental to CAP (C of A process, database, Lowest Achievable Emission Rate, standards development) in preparation for regulation implementation.

350.0\*

\* Additional staff will also be required in other MOE program areas.

Direction is required on both the approach that the program should take and the timing of implementation.

#### Tire Recycling Program

In the 1990-91 Estimates the Ministry obtained \$16 million to initiate programs to address the problem of used tires in the Province.

Two components of the program: research into tire derived products, technologies and market development and the use of tires in the development of rubberized asphalt are under the control of Management Board.

In order to spend the \$7 million outstanding for these program areas, the



1990-91  
(\$000's)

Ministry requires approval of the Management Board.

Ontario Round Table on the Environment and Economy

The Round Table process of strategy development and public consultation is scheduled to begin in early spring 1991. A total funding shortfall for the Round Table for these initiatives exists, including \$241,800 for salaries for eight staff.

949.0

Vehicle Emission Control Program

The Vehicle Emissions Control Program is an inter-Ministerial program developed to reduce air pollution from motor vehicles and the fuel delivery infrastructure. The first phase, the requirement of evaporative controls at gasoline storage and distribution facilities, has been developed and can be easily implemented in a short timeframe. A program for the inspection of pollution control equipment upon certification has also been developed.

The Vehicle Emission program needs to be considered at Cabinet. Resources and staff are required for the initiative if it is to proceed as planned. MOE's participation in the evaporative controls phase of the program in 1990-91 will require 13 staff and \$750,000. Participation in an inspection upon certification program (including public education) will require two staff and \$385,000 in 1990-91. Participation in a study investigating mandatory regular inspection will require \$220,000 in 1990-91.

Resource implications for other Ministries (MTO, MCCR, SG) occur from the



1990-91  
(\$000's)

program. Total 1990-91 resource implications for the other Ministries are six staff and \$764,700.

Discussion Paper - Towards a Sustainable Waste Management System

The "Towards a Sustainable Waste Management System" discussion paper was developed to initiate discussion on reduced reliance on disposal, environmentally secure waste management facilities, timely facility development and financial sustainability (user pay). The paper is currently out for public consultation until October 31, 1990. Ministry action to the public response will shape Ontario's waste management program into the 1990's.

Direction on what action should occur once public consultation is completed will be required. Resource implications could arise depending on the direction taken.

Cleansweep Lottery

The Cleansweep Lottery was instituted in the summer of 1990. Proceeds from the lottery were to aid environmental projects in the province. The Ministry has been developing both eligibility criteria for projects requesting assistance from the lottery funds and an administrative framework to respond to the requests.

A decision is required on the criteria for eligibility. Resources will be required to administer the program, including eight staff positions and \$330,000.

330.0



1990-91  
(\$000's)

Environmental Assessment Program  
Improvement Project (EAPIP)

EAPIP was launched in 1988 to streamline and make more effective the process under the Environmental Assessment Act. Reforms to the process have been recommended in a discussion paper titled "Towards Improving the EA Program" which awaits public release.

Direction is required on the approach that the reforms should take. Resource implications could arise depending on the direction taken.

Zebra Mussels

To address the invasion of zebra mussels into the Ontario aquatic ecosystem, an Ontario initiative has been developed through the cooperation of several Ministries with the Ministry of Natural Resources taking the lead. The program involves clean-up, capital construction, research, monitoring and assessment.

4,900.0

In order to deliver the zebra mussel initiative as developed, staffing and resource implications for the MOE will have to be addressed. Five staff person-years will be required for the start-up of the program. This will increase to nine staff person-years by year four. Resource requirements range from \$4.9 million at start up to \$35.3 million at program peak.

New Vice-Chairmen of the Environmental  
Assessment Board

In response to an increased workload at the EAB, the Board requires two additional full-time members. The salary of these new Vice-Chairmen (ECP-3 level) is required.

159.0





1990-91  
(\$000's)

Environmental Youth Corp

In order to better fund the Environmental Youth Corp amongst the participating Ministries, the MOE is proposing to reassign funds internally into accounts which more closely reflect spending patterns. This requires no new funding but needs approval at the Management Board to adjust current funding provisions.

Plant Audits

Chargebacks of the Plant operations audit costs. 450.0

Detroit Incinerator

Cost of litigation on Detroit Incinerator case. 300.0

Acid Rain

Funding is required for the Communications publications dealing with Acid Rain. 200.0

Information Systems

New and enhanced systems development for Waste Management Initiatives, Laboratory Services and Corporate requirements. 3,000.0

MISA

Systems requirements for MISA - Electrical Power and Industrial Minerals sectors. 113.0

TOTAL 1990-91 34,576.0

The Resource Planning Office is monitoring expenditure patterns Ministry-wide to locate budget flexibilities and reassign funding to offset some of these 1990-91 pressures as savings are identified.



RECOMMENDATION:

- . Should the Resource Planning Office not be able to locate sufficient savings internally, the Ministry may need to request additional funding from Management Board to cover these programs.
- . Funding requirements for programs where policy direction is needed or where decisions to proceed as planned are required create significant added funding pressures. These will need to be addressed when decisions are forthcoming.

RESOURCE PLANNING OFFICE



ISSUE:        Federal Review of the Pesticide Registration Process Administered under the Pest Control Products Act (PCPA)

BACKGROUND:

- .        The Federal Government has initiated a major review of the pesticide registration process under the Pest Control Products Act.
- .        A multi-stakeholder Pesticide Registration Review Team has been established under the Chairmanship of Mr. Ghislain Leblond.
- .        MOE as the Provincial agency responsible for Pesticide Legislation was asked to establish an interministerial working group to input to the Federal process.

CURRENT SITUATION:

- .        The Ontario Working Group has prepared a preliminary Ontario submission outlining Provincial concerns and recommendations on the 20 issues under consideration by the Federal Review Team. This document was forwarded to the Federal Review Team in December 1989.
- .        The Federal Review Team released its Preliminary Draft Report in July 1990. Both environmental representatives on the review team endorsed the report but the Canadian Labour Congress prepared a dissenting position.
- .        The Federal Review Team will be conducting public meetings across the country. A meeting is scheduled for Toronto on October 3, 1990.

FUTURE ACTION:

- .        The Ontario Working Group proposes to table a written submission at the public meeting outlining our concerns.
- .        The Federal Review Team expects to provide a Final Report and Recommendations to the Minister of Agriculture by December 1990.



. Significant changes to the Federal PCPA may require changes to the Pesticides Act and Provincial programs.

HAZARDOUS CONTAMINANTS COORDINATION BRANCH





ISSUE:        Public Notification of Pesticide Use under  
                 Regulation 751 under the Pesticides Act

BACKGROUND:

- .        The regulation came into effect on Saturday, June 2, 1990 when it was published in the Ontario Gazette.
- .        Its purpose is to provide the public with an opportunity to avoid an area during or immediately following the application of a pesticide so as to minimize human exposure.
- .        The regulation mandates the following:
  - For public areas, e.g., school-yards, parks, cemeteries, and urban roadsides, posting is required from 24 hours before application of pesticides to 48 hours after completion.
  - Roadsides and rights-of-way areas in rural areas will not require posting of signs but will require newspaper advertisements and notification of adjacent landowners. If the public is invited to stop in places such as rest, picnic and scenic areas, then full public area posting requirements apply.
  - For residential lawns treated by licensed exterminators, posting is required from time of application to 48 hours after completion.
  - Public area sign must be at least 38 x 51 cm; residential sign at least 22 x 28 cm.
  - The front of the sign has the words "Keep Off", "Pesticide Use", and "For Information Contact" (with the telephone number of a person to contact for more information) together with a pictogram of a single silhouette of an adult person within a red circle with an oblique red bar across it.
  - The back of the sign must provide information on the pesticide used, the registration number and purpose of the treatment, together with the same telephone number as the front.
- .        MOE carried out extensive consultation with the affected industry and other interest groups before implementing the notification requirements.



The main concerns raised by the pesticide industry included:

- The 24 hour pre-notification period in public areas.
- The 48 hour post-treatment notification (a 24 hour period was proposed by the pesticide industry).
- The requirement for posting roadsides in rural areas and limited access highways.
- The exemption for homeowners and agriculturists.

Environmental and other interest groups were very supportive of the proposed amendment and suggested several changes including:

- Extended pre- and post-notification periods of several weeks.
- Future extension of the amendment to cover pesticide applications performed by homeowners and agriculturists.
- Special requirements for school playgrounds.

Based on the input received, MOE exempted limited access highways (Queen Elizabeth and 400 series) and allowed the use of newspaper ads and flyers as alternatives to signs in rural areas. The 24 hour pre-notification for public areas and 48 hour post-treatment notification period, and the exemption for homeowners were not changed.

MOE selected the 48 hours post-treatment warning time based on two independent medical opinions which suggested that it provided a reasonable margin of safety.

Two components of the regulation, added after the consultation period, triggered a hostile response from the pesticide industry: the requirement that the applicator remove the signs following the 48 hour post-treatment period; and the inclusion of the words "Keep Off" on the signs.

The first of these components has been amended to permit the applicator to arrange for the property owner to



remove the sign, while leaving ultimate responsibility with the applicator.

With respect to the second, the regulatory requirement remains, but golf course pesticide applicators have been given permission to replace the words "Keep Off" with "Warning" on the required signs.

Industry continues to complain about the requirements of the regulation.

#### FUTURE ACTION:

The special consideration given to golf course signage will be continued unless contrary instructions are received.

The impacts of the regulation will be examined, with a view to determining whether further changes should be considered.



ISSUE:      **Grower Pesticide Safety Course (GPSC)**

BACKGROUND:

- . Under the Ontario Pesticides Education Program (OPEP), MOE and OMAF have provided training on pesticide use for farmers.. Participation in the program is at present voluntary.
- . OACPC, which represents many of the grower groups, had requested that the program be accelerated and that grower certification become mandatory by 1991.
- . Training for 21,699 growers has been completed. To date approximately 15,000 growers still require certification. (This assumes one certified farmer per farm unit).

CURRENT SITUATION:

- . The regulation requiring grower certification has been drafted in cooperation with the various stakeholders and is currently being reviewed by the Legislative Counsel of Cabinet.
- . The proposed grower regulation will require one certified applicator per farm unit for both the purchase and use of pesticides.

FUTURE ACTION:

- . MOE will make the necessary changes to Regulation 751 under the Pesticides Act to cover mandatory certification of growers.
- . MOE will conduct a mailing to vendors to inform them of the new regulation when it becomes gazetted.
- . OMAF will be responsible for notifying farmers (growers).
- . OMAF has expressed some willingness to assist in the compliance monitoring and enforcement activities.

HAZARDOUS CONTAMINANTS COORDINATION BRANCH





ISSUE:      Pesticide Vendor Certification Course (PVCC)

BACKGROUND:

- .     A voluntary training program for vendors of pesticides was initiated in 1982 with the intent of changing to mandatory certification.
- .     Training for 1,302 vendor representatives has been completed. To date, approximately 1,200 vendors still require certification. This assumes one certified vendor per location.
- .     The course fee is \$100 per person and is based on full cost recovery.

CURRENT SITUATION:

- .     MOE has developed regulations for mandatory vendor certification (in particular wholesale, limited wholesale, retail Class 1 and 2 vendors).
- .     The new regulation requires the certification of at least one employee per vendor outlet. Recertification is required every five years.
- .     The regulation was approved and passed by Regulation Committee in February, 1990 but was not gazetted.
- .     The date for implementation of mandatory vendor certification is April 1, 1991.

FUTURE ACTION:

- .     MOE will conduct a mailing to vendors, applicators and operators notifying them of the new regulation as soon as it is gazetted.

HAZARDOUS CONTAMINANTS COORDINATION BRANCH



ISSUE:      Pesticide Container Disposal

BACKGROUND:

- .     Some municipalities and landfill site operators have been refusing to accept empty pesticide containers because of concerns for off-site leaching, and the potential for groundwater contamination. The Ontario Ministry of Agriculture and Food (OMAF) has also raised concerns over this problem.
- .     The Ontario Ministry of the Environment (MOE) currently recommends triple rinsing of emptied pesticide containers and disposal at landfill sites.
- .     MOE has funded research to provide information on the effectiveness of triple rinsing of emptied pesticide containers as well as provided funds for the monitoring of test wells at certain landfill sites that were accepting emptied pesticide containers on a regular basis.
- .     Agriculture Canada, in cooperation with Environment Canada, is attempting to provide more effective and consistent label instructions on disposal of emptied containers.

CURRENT SITUATION:

- .     A Pesticide Container Disposal Committee was established by the OMAF/MOE Deputy Minister's Liaison Committee to resolve pesticide disposal issues, to keep abreast of new initiatives and research related to pesticide disposal and to provide a forum for exchange of information with the pesticide industry.
- .     A large drum recycling project has been granted \$198,300 by MOE for commencement in the fall of 1990. This is a pilot project to obtain experience in metal pesticide container recycling with a view to expanding this to other types of containers (i.e., glass and plastic).

FUTURE ACTION:

- .     MOE, OMAF, the Crop Protection Institute of Canada, AgCare and the Pesticide Container Disposal Committee



will continue to look for cooperative, practical and effective methods for managing pesticide containers.

. An MOE empty pesticide container strategy plan will be brought forward for consideration.



ISSUE:        Environmental Technologies Program and the  
                 Environmental Protection Industry

BACKGROUND:

- .     The Environmental Technologies Program (ETP) has committed \$30 million over five years to "encourage leadership in the development of new technologies and industries to meet the demands of the industrial world in overcoming environmentally-damaging production practices".
- .     Woods Gordon Management Consultants completed a study of the Ontario environmental protection industry. Approximately 28,000 Ontarians are employed in the generation of about \$2 billion in annual sales of Ontario produced goods and services in this industry. Future growth forecasts range from 15% in the air pollution field to 18% in the water and wastewater fields.
- .     The ETP is committed to development of technologies across the following major technology areas:
  - tire recycling technologies;
  - 3Rs technologies;
  - waste management;
  - analytical instrumentation;
  - water and sewage treatment;
  - air pollution control; and
  - socio-economic impact (progress toward achieving sustainable development).

CURRENT SITUATION:

- .     The Environmental Technologies Program was initiated on January 30, 1990 with membership from across the provincial government and representation of federal agencies.
- .     Primary interest in the Environmental Technologies Program is mainly from small business interests including inventors, scientists and entrepreneurs.
- .     As of August 30, 1990 the Environmental Technologies Program:
  1.    Has received 123 unsolicited proposals for a total ETP request of \$100,130,333 in response to the





June 15, 1990 deadline (These proposals are currently under review and will be considered for approval on November 1 and 2, 1990.).

2. Has conditionally approved the funding of three proposals for a total ETP request of \$1,351,900.
3. Has had over 800 requests for information about the ETP and application kits for the program.

FUTURE ACTION:

The Research and Technology Branch is presently accepting proposals for funding for the November 15, 1990 deadline.

RESEARCH AND TECHNOLOGY BRANCH



ISSUE:      Technology Transfer Conference

BACKGROUND:

- .      The annual Technology Transfer Conference is considered by many as Canada's leading environmental research forum. It attracts close to 800 participants from universities, consulting firms, industry, research institutions and government. The Conference is also gaining potential as an international environmental event.

CURRENT SITUATION:

- .      The 1990 Technology Transfer Conference is planned for November 19 and 20 at the Royal York Hotel. State-of-the-art research and new technological advances will be presented in five concurrent sessions on air pollution, water treatment, liquid and solid waste treatment, analytical methods and environmental socio-economics. Research on multi-media contaminants and biotechnology will be presented in a newly established session.
- .      The program this year includes over 80 verbal presentations, a panel discussion, over 30 poster presentations, two keynote addresses and 10 feature papers.

FUTURE ACTION:

- .      It is hoped that the new Minister of the Environment will open the Conference, with an introduction by the Deputy Minister. This year's keynote speakers are Dr. Noel Brown and Mr. Jim Bruce.
- .      The 1990 Karasek Award for Achievements in Environmental Science will be presented on the second day.

RESEARCH AND TECHNOLOGY BRANCH



ISSUE:      **Environmental Security Account Funding**

BACKGROUND:

The Environmental Security Account (1990-91 budget of \$25.1 million) was established to enable the Ministry of the Environment to respond quickly to environmental threats or occurrences and to ensure the proper resolution of urgent environmental problems.

CURRENT SITUATION:

The amount spent from the Account in the 90-91 fiscal year as at August 29, 1990 was \$3.1 million.

Listed below are the expenditures and the outstanding commitments for projects over \$400,000 for this fiscal year:

<u>Projects</u>	(000's)	
	<u>Expenditures</u> 90-91 as at August 29	<u>Commitments</u> 1990-91 Sept. - March
All Tires Sites Security	606.9	1,807.7
Coal Tar Investigations	50.4	499.1
Hagersville Tire Fire	1,355.4	10,950.0*
Killaloe Supply of Water	4.2	1,143.0
Mississauga Soil Replacement	60.6	2,300.0
Smithville PCB Clean-up	<u>710.4</u>	<u>12,200.0*</u>
Sub-Total	2,787.9	28,899.8
Other Projects	<u>361.2</u>	<u>3,748.2</u>
TOTAL	<u><u>3,149.1</u></u>	<u><u>32,648.0</u></u>

\* Approval Pending

FUTURE ACTION:

Substantial additional allocations will be needed to cover the clean-ups of PCBs at Smithville and the Hagersville Tire Site.

PROJECT ENGINEERING BRANCH



ISSUE:      **Farm Practices Protection Act**

BACKGROUND:

- . Farm-related odour, noise and dust complaints are a source of concern to both the Ministry of the Environment (MOE) and the Ontario Ministry of Agriculture and Food (OMAF). Consultation with OMAF is essential and encouraged in the resolution of such environmental complaints.
- . MOE's Farm Pollution Advisory Committee (FPAC) is appointed under Section 3(i) of the Environmental Protection Act. The primary purpose of the Committee is to advise MOE on whether or not animal waste is handled and disposed of in accordance with normal farming practices. This advice is considered necessary, since animal waste disposal, in accordance with normal farming practices, is exempt from certain provisions of the EPA. The EPA does not define normal farming practices.
- . The Farm Practices Protection Act received Royal Assent on December 15, 1988. The Act, which is administered by OMAF, deals with odour, noise and dust complaints from farm practices which do not violate any land use control law or related provincial legislation, including the EPA, the OWRA and the Pesticides Act. It provides for hearings before a Farm Practices Protection Board into odour, noise and dust complaints. If Ministry staff (MOE and/or OMAF) are unable to resolve a dispute, the complainant may refer the matter to the Farm Practices Protection Board. Through the operation of the Board, a resolution of incidence may be possible. The term "normal farming practices" is defined in the Farm Practices Protection Act.
- . A protocol between MOE and OMAF for handling odour, noise and dust incidents has been approved and distributed to both Ministries for internal use. The protocol officially came into effect with the appointment of the Farm Practices Protection Board in February 1990.
- . With the establishment of the Farm Practices Protection Board, MOE has agreed with the protocol that the FPAC will not be involved in complaints about farm-related noise, odour or dust. The FPAC will continue to advise MOE staff with respect to livestock-related water problems.





#### CURRENT SITUATION:

- . The first hearing before the Farm Practices Protection Board took place in May 1990. It dealt with a complaint about the noise from cow-bells.
- . To this date, a total of two hearings have been held. MOE staff have been actively involved in one of the hearings.
- 4. The FPAC has provided advice to MOE staff on three farm-related water quality situations since April of 1990. Two additional situations are pending.
- . In July, Management Board approved a request to renew the mandate of the FPAC as a Schedule I Advisory Agency for a period of three years, to March 31, 1993 under the same Terms of Reference. However, action on the re-appointment of two new members to fill the vacant positions has not yet been taken.

#### FUTURE ACTION:

- . It was agreed by MOE and OMAF that the protocol for handling odour, noise and dust incidents would be reviewed after 12 months from the date of the appointment of the Farm Practices Protection Board. As a result, the protocol will be reviewed in February 1991.
- . At the present time, an information package for MOE and OMAF staff is under preparation. It will provide information on the Act and information on the Board which can be given to complainants by staff.
- . Members are required to be appointed to the FPAC.



ISSUE:        Industrial Concerns in the Southeastern Region

CURRENT SITUATION:

Air Pollution

- .        In the City of Cornwall, Courtaulds Fibres Canada and Domtar Fine Papers are sources of odours (total reduced sulphur). In the case of Domtar Fine Papers, a Control Order directed the Company to eliminate the objectionable odours. The implementation of the Order resulted in compliance with Ontario's Regulations, however, complaints persist. Courtaulds was ordered to reduce carbon bisulphide and hydrogen sulphide emissions to meet Ontario Regulations. A five year compliance program is half-completed.
- .        ICI (formerly CIL Inc.) operates a mercury-cell plant in Cornwall. Current emissions of mercury into the atmosphere result in higher than background levels of mercury in vegetation around the plants. However, emissions comply with Federal and Provincial Regulations. The Ministry continues to monitor the mercury levels in vegetation.
- .        Ivaco operates a steel casting mill near L'Orignal. Flue dust emissions result in elevated metal levels in soil adjacent to the plant. Metals such as copper, iron, lead, zinc and chromium exceed recommended levels. Abatement studies are underway to develop an action plan to reduce the levels of metals in flue gas.
- .        An Order is in preparation to require Nitrochem (Maitland) to reduce atmosphere emissions of nitrogen oxides. These emissions are highly visible and have been causing complaints.

Industrial Discharges

- .        Courtaulds Fibres Limited in Cornwall discharges toxic wastes into the St. Lawrence River. This plant has a long history of spills. An Order is in preparation to have the Company address the spill problem.
- .        The Ministry has served a generic Pulp and Paper Control Order on Domtar Fine Papers to reduce levels of BOD and organic halides.
- .        In Hawkesbury, Amoco Fibres has a groundwater problem due to a leaking lagoon containing latex wastes. The major contaminant of concern is vinyl chloride, a known



carcinogen. Levels of this chemical in the groundwater, both on and off property, exceed the Drinking Water Objective. Remedial measures developed by the Company's consultant are being reviewed by the Ministry. An Order is being finalized.

- . Under the MISA program, the effluent from 39 industries have been monitored since late 1989. To date, dioxins have been detected at Nitrochem in Maitland. The Company has been directed to find and eliminate the source of dioxins.

#### Contaminated Industrial Lands

- . In Cornwall, the Cowall property is contaminated with coal tars from an operation in the past owned by Domtar Limited. A clean-up Order has been prepared to serve on both the present and past owners.
- . The Ministry has operated an arsenic treatment plant at Deloro for the past 11 years. There is a need to establish a permanent storage facility for the arsenic sludges produced by this treatment plant. A major expenditure (\$3,000,000 to \$5,000,000) would be required to completely clean-up the buried waste and restore the site.
- . Buried drums of toxic wastes and contaminated soil found in Rednersville (Prince Edward County) have been removed by the Ministry and a study is underway on the restoration of groundwater.



